



KBC Networks Price List USA and Canada

2022

-List Price-

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About Model Numbers

Due to variations in geographic locations and system applications, KBC Networks offers many options in the configuration of models. Accordingly, the suffix of our product model numbers describes options available in their packaging. Default configurations are listed in this price schedule. Please contact your sales representative for assistance with special configuration requirements.

For example, referencing the table below, model FDVA1-M1T-**MSA** indicates the unit is configured in compact form factor, with ST connector, and US style power plug.

First digit (**x**) – packaging / form factor:

- W** Wall mount/desktop configuration
- M** Compact format
- R** 1U or 2U 19" rack mount (additional charges apply for Standard Digital models)
- A** 2U chassis card (for Media Converter series)
- B** 3U chassis card (for Standard Digital series)
- C** 4U chassis card (for ASFOM series)

Second digit (**y**) – fiber connector type used:

- F** FC connector
- S** ST connector
- C** SC connector
- L** LC connector

Third digit (**z**) – power plug type used:

- A** US power plug type B (3-pin grounded) or type A (2-pin ungrounded), 100-127V, 15A
- B** UK power plug type G (220-240V, 13A, 3 pins)
- C** Euro power plug type F (220-240V, 16A, 2 pins)
- D** Special
- E** Australian power plug type I (220-240V, 10A, 2 or 3 pins)
- F** China power plug type I (220-240V, 10A, 2 or 3 pins)
- N** No power supply/adapter

Wireless Products

Wireless Ethernet System Kits

Model Number	Product Description	MSRP
WES4 Series Wireless Ethernet Systems		
WES4-KT	Gen 4 5GHz Wireless Ethernet System Kit consisting of two (2) WES4-AX-CF modules each with integrated 17dBi antennas and all mounting hardware. NOTE: WES4 is IEEE802.3af PoE compliant and will power via PoE switches or injectors. Power supplies and injectors are NOT included in the kit.	1,240.00
WES4-KT-P5	Convenience bundled kit of (1) WES4-KT, (1) ESUGS4-G1-B and (1) NDR-120-48 power supply. Note: WES4 is IEEE802.3af PoE compliant and will power via one of the PoE ports on the included ESUGS4 switch leaving 3 available PoE ports for other IP devices. Power supplies and injectors are NOT included in the kit. Host requires PoE power at the 'receive end'.	1,860.00
WES4-KT-P8	Convenience bundled kit of (1) WES4-KT, (1) ESUGS8-B and (1) NDR-240-48 power supply. NOTE: WES4 is IEEE802.3af PoE compliant and will power via one of the PoE ports on the included ESUGS8 switch leaving 3 available PoE ports for other IP devices. Power supplies and injectors are NOT included in the kit. Host requires PoE power at the 'receive end'.	2,091.00
WES4HTG Series High Throughput Wireless Ethernet Systems		
WES4HTG-KT	Wireless High Throughput Gigabit Ethernet System Kit (up to 650Mbps bi-directionally) consisting of (2) WES4HTG-AX-CA modules with 17dBi antennas and all mounting hardware.	3,130.00
WES4HTG-KT-P5	Wireless High Throughput Ethernet System Kit consisting of (2) WES4HTG-AX-CA modules with 17dBi antennas, (1) ESUGS4-G1-B, (1) NDR-120-48, and all mounting hardware.	3,750.00
WES4HTG-KT-P8	Wireless High Throughput Ethernet System Kit consisting of (2) WES4HTG-AX-CA modules with 17dBi antennas, (1) ESUGS8-B, (1) NDR240-48, and all mounting hardware.	3,981.00

Wireless Ethernet System Modules

Model Number	Product Description	MSRP
WES4 Series Individual Modules – 5GHz		
WES4-AX-BF	Gen 4 5 GHz Wireless Ethernet Radio with integrated internal 9 dBi Directional Antenna; IEEE802.3af PoE powered; Includes all mounting hardware.	620.00
WES4-AX-CF	Gen 4 5 GHz Wireless Ethernet Radio with integrated internal 17 dBi Directional Antenna; IEEE802.3af PoE powered; Includes all mounting hardware.	620.00
WES4HTG Series High Throughput Individual Modules – 5GHz		
WES4HTG-AX-BA	5 GHz high throughput (up to 650Mbps bi-directional) wireless Ethernet radio. Selectable point-to-point host, point to multipoint host or client. 9dBi directional antenna, PoE or midspan injector. US power adapter.	1,565.00
WES4HTG-AX-CA	5 GHz high throughput (up to 650Mbps bi-directional) wireless Ethernet radio. Selectable point-to-point host, point to multipoint host or client. 17dBi directional antenna, PoE or midspan injector. US power adapter.	1,565.00
WES4HTG-EXP-CA	Class I, II, Division 1, Groups B, C, D, E, F, G explosion-proof 5GHz high throughput (up to 650Mbps bi-directional) wireless Ethernet radio. Selectable point-to-point host, point to multipoint host or client. 17dBi directional antenna, PoE or midspan injector. US power adapter.	<i>Please contact your KBC representative for pricing and availability.</i>

Wireless System Accessories

Model Number	Product Description	MSRP
Antenna with Connecting Cable		
PAT5M	5 GHz 17dBi MIMO antenna with connecting cables.	368.00
OD5M-13	5 GHz 13dBi high gain omni-directional antenna.	368.00
VT58G	5 GHz 5dBi omni-directional antenna.	26.00
Accessories for Wireless		
WES-PMKT	Pole mounting bracket kit for all WES series radios.	68.00
WES3-PIM-WP	Wall plug power supply injector used with WES3 Series modules. 24VDC input.	95.00
WES4-PK	WES4 Power Kit consisting of (1) PS48-500-A and (1) PG-PIM.	59.00
PG-PIM	Gigabit power injection module used with 48V PoE input WES series radios.	30.00
PS48-500-A	48VDC power supply for use with KBC WES3HTG systems. US power plug.	30.00

PoE Power Kits

Model Number	Product Description	MSRP
PWB Series Powerboxes		
PWB-S2-G1	10"x8"x4" Pole mount NEMA 4X Enclosure Power kit with integrated hardened 100W Power Supply and 2-port industrial unmanaged Gigabit PoE+ Switch also offering one additional non-PoE Gigabit port. (Typically used to power one camera and one wireless antenna but other uses are also possible.)	630.00
PWB-H2-G1	10"x8"x6" Pole mount NEMA 4X Enclosure Power kit with integrated hardened 200W Power Supply and 2-port industrial unmanaged Gigabit HPoE Switch also offering one additional non-PoE Gigabit port. (Typically used to power one HPoE camera and one wireless antenna but other uses are also possible.)	990.00
PWB-S4-G1	10"x8"x4" Pole mount NEMA 4X Enclosure Power kit with integrated hardened 150W Power Supply and 4-port industrial unmanaged Gigabit PoE+ Switch also offering one additional non-PoE Gigabit port. (Typically used to power three cameras and one wireless antenna or two cameras and two wireless antennas in a relay application.)	930.00
PWB-S4-L-G1	10"x8"x4" Pole mount NEMA 4X Enclosure Power kit with integrated hardened 200W Power Supply and 4-port industrial unmanaged Gigabit PoE+ Switch also offering one additional non-PoE Gigabit port. With 24VDC available for passive 24V PoE antennas.	990.00
PWB-S4-P2	10"x8"x4" Pole mount NEMA 4X Enclosure Power kit with integrated hardened 150W Power Supply and 4-port industrial unmanaged Gigabit PoE+ Switch with two ports Gigabit SFP (SFPs sold separately). This unit is typically used to power up to 4 cameras, or other IP devices, with fiber uplink/daisy chain capability.	990.00
PWB-M-S4-P2	10"x8"x4" Pole mount NEMA 4X Enclosure Power kit with integrated hardened 150W Power Supply and 4-port industrial managed Gigabit PoE+ Switch with two ports Gigabit SFP (SFPs sold separately). This unit is typically used to power up to 4 cameras, or other IP devices, with fiber uplink/daisy chain capability where a managed switch is needed.	1,090.00
PWB-H4-P2	10"x8"x6" Pole mount NEMA 4X Enclosure Power kit with integrated hardened 350W 54V Power Supply and 4-port industrial unmanaged Gigabit HPoE Switch (supports IEEE802.3bt on 4 ports) with two ports Gigabit SFP (SFPs sold separately). This unit is typically used to power up to 4 cameras, or other IP devices, with fiber uplink/daisy chain capability.	1,090.00
PWB-S8	10"x8"x6" Pole mount NEMA 4X Enclosure Power kit with integrated hardened 350W 48V Power Supply and 8-port industrial unmanaged Gigabit PoE+ Switch. This unit is typically used to power up to 8 IP devices (any variation of cameras or wireless antennas). Note: All ports are IEEE802.3at PoE+ so there are no non-PoE ports or fiber ports.	1,090.00
PWB-S8-P2	10"x8"x6" Pole mount NEMA 4X Enclosure Power kit with integrated hardened 200W Power Supply and 8-port industrial unmanaged Gigabit PoE+ Switch with two additional ports Gigabit SFP (SFPs sold separately).	1,350.00
PWB-M-S8-C2	10"x8"x6" Pole mount NEMA 4X Enclosure Power kit with integrated hardened 350W Power Supply and 8-port industrial managed Gigabit PoE+ Switch with two additional ports Gigabit SFP (SFPs sold separately) or copper non-PoE uplink.	1,490.00
PWB-H4S4-P2	10"x8"x6" Pole mount NEMA 4X Enclosure Power kit with integrated hardened 350W 54V Power Supply and 4-port industrial unmanaged Gigabit HPoE Switch (supports IEEE802.3bt on 4 ports) with 4 additional PoE+ ports as well as two more ports Gigabit SFP (SFPs sold separately). This unit is typically used to power up multiple HPoE cameras, plus other standard PoE or PoE+ powered IP devices, and also supports fiber connectivity needs.	1,290.00

Remote Solar Power Kits

Model Number	Product Description	MSRP
Remote Solar Power Kits - Lithium Phosphate (LiFePo4) Compatible		
KBC-AL2-100W	Advanced Remote Power Kit - Lithium compatible. Side panel mount for 3-6" pole. Includes (1) 100W solar panel. Max winter month wattage budget in ZONE 1: 14W ZONE 2: 12W ZONE 3: 9W ZONE 4: 6.5W ZONE 5: 3.5W. NEMA 4X powder-coated aluminum enclosure with battery space of 12.5"d x 13.5"w x 9.5"h, suitable to fit up to 2 of 100Ah (max) of most brands SLA or up to 2 of 100Ah of most brands LiFePo4 batteries (this kit to be wired for 12VDC output). Batteries and pole not included. Note: Solar power kits are special order, non-returnable, non-refundable.	2,468.00
KBC-AL2-200W	Panel Advanced Remote Power Kit - Lithium compatible. Side panel mount for 3-6" pole. Includes (2) 100W solar panels. Max winter month wattage budget in ZONE 1: 28W ZONE 2: 24W ZONE 3: 18W ZONE 4: 13W ZONE 5: 7W. NEMA 4X powder-coated aluminum enclosure with battery space up to 12.5"d x 13.5"w x 9.5"h, suitable to fit up to 2 of 100Ah (max) of most brands SLA or up to 2 of 100Ah of most brands LiFePo4 batteries (this kit to be wired in series for 24VDC output). Batteries and pole not included. Note: Solar power kits are special order, non-returnable, non-refundable.	3,360.00
KBC-AL2-300W	300-Watt Advanced Remote Power Kit - Lithium compatible. Side panel mount for 3-6" pole. Includes (1) 300W solar panel. Maximum 10-45 continuous watts depending on geographic location. NEMA 4X powder-coated aluminum enclosure with battery space of 12.5"d x 13.5"w x 9.5"h, suitable to fit up to 2 of 100Ah (max) of most brands SLA or up to 2 of 100Ah of most brands LiFePo4 batteries. Batteries and pole not included. Note: Solar power kits are special order, non-returnable, non-refundable.	4,515.00
KBC-AL2-400W	Advanced Remote Power Kit - Lithium compatible. Side panel mount for 3-6" pole. Includes (1) 400W solar panel. Max winter month wattage budget in ZONE 1: 51W ZONE 2: 46W ZONE 3: 35W ZONE 4: 24W ZONE 5: 12W. NEMA 4X powder-coated aluminum enclosure with battery space of 12.5"d x 13.5"w x 9.5"h, suitable to fit up to 2 of 100Ah (max) of most brands SLA or up to 2 of 100Ah of most brands LiFePo4 batteries (this kit to be wired in series for 24VDC output). Batteries and pole not included. Note: Solar power kits are special order, non-returnable, non-refundable.	4,935.00
KBC-AL2-600W	Advanced Remote Power Kit - Lithium compatible. Side panel mount for 3-6" pole. Includes (2) 300W solar panels. Max winter month wattage budget in ZONE 1: 90W ZONE 2: 70W ZONE 3: 54W ZONE 4: 36W ZONE 5: 20W. NEMA 4X powder-coated aluminum enclosure with battery space of 12.5"d x 13.5"w x 9.5"h, suitable to fit up to 2 of 100Ah (max) of most brands SLA or up to 2 of 100Ah of most brands LiFePo4 batteries (this kit to be wired in series for 24VDC output). Batteries and pole not included. Note: Solar power kits are special order, non-returnable, non-refundable.	6,405.00
KBC-AL2-800W	Advanced Remote Power Kit - Lithium compatible. Includes (1) adjustable top of 8" Schedule 40 metal pole solar mount and (2) 400W solar panels. Max winter month wattage budget in ZONE 1: 103W ZONE 2: 92W ZONE 3: 70W ZONE 4: 48W ZONE 5: 25W. NEMA 4X powder-coated aluminum enclosure with battery space of 12.5"d x 13.5"w x 9.5"h, suitable to fit up to 2 of 100Ah (max) of most brands SLA or up to 2 of 100Ah of most brands LiFePo4 batteries (this kit to be wired in series for 24VDC output). Batteries not included. Note: Solar power kits are special order, non-returnable, non-refundable.	7,350.00
KBC-AL2-1200W	Advanced Remote Power Kit - Lithium compatible. Includes (1) adjustable top of 8" Schedule 40 metal pole solar mount and (4) 300W solar panels. Max winter month wattage budget in ZONE 1: 180W ZONE 2: 140W ZONE 3: 108W ZONE 4: 72W ZONE 5: 40W. NEMA 4X powder-coated aluminum enclosure with battery space 12.5"d x 13.5"w x 9.5"h, suitable to fit up to 2 of 100Ah (max) of most brands SLA or up to 2 of 100Ah of most brands LiFePo4 batteries (this kit to be wired in series for 24VDC output). Batteries not included. Note: Solar power kits are special order, non-returnable, non-refundable.	8,978.00
KBC-AL2-ENC	NEMA 4X powder-coated aluminum enclosure with battery space of 12.5"d x 13.5"w x 9.5"h, suitable to fit up to 2 of 100Ah (max) of most brands SLA or up to 2 of 100Ah of most brands LiFePo4 batteries. Batteries not included.	956.00

**** Note: Solar power kits are special order, non-returnable, non-refundable.**

Model Number	Product Description	MSRP
Remote Solar Power Kits - Lithium Phosphate (LiFePo4) Compatible		
KBC-AL5-100W	Advanced Remote Power Kit - Lithium compatible. Side panel mount for 3-6" pole. Includes (1) 100W solar panel. Max winter month wattage budget in ZONE 1: 14W ZONE 2: 12W ZONE 3: 9W ZONE 4: 6.5W ZONE 5: 3.5W. NEMA 4X powder-coated aluminum enclosure with battery space of 13"d x 21"w x 19"h, suitable to fit up to 2 of 250Ah of most brands SLA or up to 400Ah of most brands LiFePo4 batteries (this kit to be wired for 12VDC output). Batteries and pole not included. Note: Solar power kits are special order, non-returnable, non-refundable.	3,518.00
KBC-AL5-200W	Advanced Remote Power Kit - Lithium compatible. Side panel mount for 3-6" pole. Includes (2) 100W solar panels. Max winter month wattage budget in ZONE 1: 28W ZONE 2: 24W ZONE 3: 18W ZONE 4: 13W ZONE 5: 7W. NEMA 4X powder-coated aluminum enclosure with battery space of 13"d x 21"w x 19"h, suitable to fit up to 2 of 250Ah of most brands SLA or up to 400Ah of most brands LiFePo4 batteries (this kit to be wired in series for 24VDC output). Batteries and pole not included. Note: Solar power kits are special order, non-returnable, non-refundable.	4,515.00
KBC-AL5-300W	Advanced Remote Power Kit - Lithium compatible. Side panel mount for 3-6" pole. Includes (1) 300W solar panel. Max winter month wattage budget in ZONE 1: 45W ZONE 2: 35W ZONE 3: 27W ZONE 4: 18W ZONE 5: 10W. NEMA 4X powder-coated aluminum enclosure with battery space of 13"d x 21"w x 19"h, suitable to fit up to 2 of 250Ah of most brands SLA or up to 400Ah of most brands LiFePo4 batteries (this kit to be wired in series for 24VDC output). Batteries and pole not included. Note: Solar power kits are special order, non-returnable, non-refundable.	5,513.00
KBC-AL5-400W	Advanced Remote Power Kit - Lithium compatible. Side panel mount for 3-6" pole. Includes (1) 400W solar panel. Max winter month wattage budget in ZONE 1: 51W ZONE 2: 46W ZONE 3: 35W ZONE 4: 24W ZONE 5: 12W. NEMA 4X powder-coated aluminum enclosure with battery space of 13"d x 21"w x 19"h, suitable to fit up to 2 of 250Ah of most brands SLA or up to 400Ah of most brands LiFePo4 batteries (this kit to be wired in series for 24VDC output). Batteries and pole not included. Note: Solar power kits are special order, non-returnable, non-refundable.	5,985.00
KBC-AL5-600W	Advanced Remote Power Kit - Lithium compatible. Side panel mount for 3-6" pole. Includes (2) 300W solar panels. Max winter month wattage budget in ZONE 1: 90W ZONE 2: 70W ZONE 3: 54W ZONE 4: 36W ZONE 5: 20W. NEMA 4X powder-coated aluminum enclosure with battery space of 13"d x 21"w x 19"h, suitable to fit up to 2 of 250Ah of most brands SLA or up to 400Ah of most brands LiFePo4 batteries (this kit to be wired in series for 24VDC output). Batteries and pole not included. Note: Solar power kits are special order, non-returnable, non-refundable.	7,035.00
KBC-AL5-800W	Advanced Remote Power Kit - Lithium compatible. Includes (2) 400W solar panels. Max winter month wattage budget in ZONE 1: 103W ZONE 2: 92W ZONE 3: 70W ZONE 4: 48W ZONE 5: 25W. NEMA 4X powder-coated aluminum enclosure with battery space of 13"d x 21"w x 19"h, suitable to fit up to 2 of 250Ah of most brands SLA or up to 400Ah of most brands LiFePo4 batteries (this kit to be wired in series for 24VDC output). Batteries and pole not included. Note: Solar power kits are special order, non-returnable, non-refundable.	7,980.00
KBC-AL5-1200W	Advanced Remote Power Kit - Lithium compatible. Includes (1) adjustable top of 8" Schedule 40 metal pole solar mount and (4) 300W solar panels. Max winter month wattage budget in ZONE 1: 180W ZONE 2: 140W ZONE 3: 108W ZONE 4: 72W ZONE 5: 40W. NEMA 4X powder-coated aluminum enclosure with battery space of 13"d x 21"w x 19"h, suitable to fit up to 2 of 250Ah of most brands SLA or up to 400Ah of most brands LiFePo4 batteries (this kit to be wired in series for 24VDC output). Batteries not included. Note: Solar power kits are special order, non-returnable, non-refundable.	9,503.00

Model Number	Product Description	MSRP
KBC-AL5-1200W-4SPM	Advanced Remote Power Kit - Lithium compatible. Includes (4) side-of-pole solar panel mounts and (4) 300W solar panels. Max winter month wattage budget in ZONE 1: 180W ZONE 2: 140W ZONE 3: 108W ZONE 4: 72W ZONE 5: 40W. NEMA 4X powder-coated aluminum enclosure with battery space of 13"d x 21"w x 19"h, suitable to fit up to 2 of 250Ah of most brands SLA or up to 400Ah of most brands LiFePo4 batteries (this kit to be wired in series for 24VDC output). Batteries and pole not included. Note: Solar power kits are special order, non-returnable, non-refundable.	10,028.00
KBC-AL5-1600W	Advanced Remote Power Kit - Lithium compatible. Includes (1) adjustable top of 8" Schedule 40 metal pole solar mount and (4) 400W solar panels. Max winter month wattage budget in ZONE 1: 206W ZONE 2: 184W ZONE 3: 140W ZONE 4: 96W ZONE 5: 50W. NEMA 4X powder-coated aluminum enclosure with battery space of 13"d x 21"w x 19"h, suitable to fit up to 2 of 250Ah of most brands SLA or up to 400Ah of most brands LiFePo4 batteries (this kit to be wired in series for 24VDC output). Batteries not included. Note: Solar power kits are special order, non-returnable, non-refundable.	13,125.00
KBC-AL5-1600W-4SPM	Advanced Remote Power Kit - Lithium compatible. Includes (4) side-of-pole solar panel mounts and (4) 400W solar panels. ZONE 1: 206W ZONE 2: 184W ZONE 3: 140W ZONE 4: 96W ZONE 5: 50W. NEMA 4X powder-coated aluminum enclosure with battery space of 13"d x 21"w x 19"h, suitable to fit up to 2 of 250Ah of most brands SLA or up to 400Ah of most brands LiFePo4 batteries (this kit to be wired in series for 24VDC output). Batteries and pole not included. Note: Solar power kits are special order, non-returnable, non-refundable.	13,650.00
KBC-AL5-ENC	NEMA 4X powder-coated aluminum enclosure with battery space of 13"d x 21"w x 19"h, suitable to fit up to 2 of 250Ah of most brands SLA or up to 400Ah of most brands LiFePo4 batteries.	1,313.00

**** Note: Solar power kits are special order, non-returnable, non-refundable.**

UPS Backup Kits

Model Number	Product Description	MSRP
Outdoor UPS Backup Kits		
KBC-UAL2-12	12VDC UPS backup charge kit. Advanced 3 Stage Lithium UPS controller w/ Lithium Algorithm. NEMA 4X powder-coated aluminum enclosure with battery space up to 12.5"d x 13.5"w x 9.5"h, suitable to fit 2 of 100Ah (max) of most brands SLA or up to 2 of 100Ah of most brands LiFePo4 batteries, industrial wall/pole mount. Input: 110-220VAC, Output: 12VDC/24A. Pole and batteries not included.	2,145.00
KBC-UAL2-24	24VDC UPS backup charge kit. Advanced 3 Stage Lithium UPS controller w/ Lithium Algorithm. NEMA 4X powder-coated aluminum enclosure with battery space up to 12.5"d x 13.5"w x 9.5"h, suitable to fit 2 of 100Ah (max) of most brands SLA or up to 2 of 100Ah of most brands LiFePo4 batteries, industrial wall/pole mount. Input: 110-220VAC, Output: 24VDC/12.5A. Pole and batteries not included.	2,145.00
KBC-UAL5-12	12VDC UPS backup charge kit. Advanced 3 Stage Lithium UPS controller w/ Lithium Algorithm. NEMA 4X powder-coated aluminum enclosure with battery space of 13"d x 21"w x 19"h, suitable to fit up to 2 of 250Ah of most brands SLA or up to 400Ah of most brands LiFePo4 batteries, industrial wall/pole mount. Input: 110-220VAC, Output: 12VDC/24A. Pole and batteries not included.	3,245.00
KBC-UAL5-24	24VDC UPS backup charge kit. Advanced 3 Stage Lithium UPS controller w/ Lithium Algorithm. NEMA 4X powder-coated aluminum enclosure with battery space of 13"d x 21"w x 19"h, suitable to fit up to 2 of 250Ah of most brands SLA or up to 400Ah of most brands LiFePo4 batteries, industrial wall/pole mount. Input: 110-220VAC, Output: 24VDC/12.5A. Pole and batteries not included.	3,245.00
Solar Kit and UPS Batteries - Lithium-Ion Phosphate		
KBC-B12100	12VDC 100Ah Sealed Lead Acid Battery	462.00
KBC-B12250	12VDC 250Ah Sealed Lead Acid Battery. To be used with AL5 or UAL5 series, will not fit into the smaller enclosure options.	1,065.00
LIFEPO4-100A12V	12V/100Ah Lithium Phosphate Battery/BMS. 1200W of stored power (~ equal to a 180Ah SLA in energy available).	1,733.00

Power Kit Accessories

Model Number	Product Description	MSRP
Accessories for the Power Kits - (PoE Injectors / DC to DC Converters / DC to AC Converters)		
ESUGS2-G1-B	Industrial Ethernet switch, unmanaged, (2) 10/100/1000Mbps IEEE802.3at PoE+ copper ports, (1) non-PoE 10/100/1000Mbps port, IP40 industrial level 3 ESD protection. 45-57VDC input. DIN rail/desktop/wall-mount. Requires power supply sold separately.	252.00
ESUGH4-P2-B	Industrial Ethernet switch, unmanaged, (4) 10/100/1000Mbps IEEE802.3bt PoE++ copper ports, (2) gigabit SFP ports. 52-57VDC input. DIN rail/desktop/wall-mount. Requires power supply sold separately.	690.00
KBC-VE-DC/DC-18	PoE converter/injector. Input: 9-36VDC. Output: 18V PoE (1A/18W).	147.00
KBC-VE-DC/DC-24	PoE converter/injector. Input: 9-36VDC. Output: 24V PoE (0.8A/19W).	147.00
KBC-VE-DC/DC-24G	Gigabit Passive PoE converter/injector. Input: 9-36VDC. Output: 24V PoE (0.8A/19W).	231.00
KBC-VE-DC/DC-48M	PoE converter/injector (metal case). Input: 9-36VDC. Output: 48V PoE (802.3af, 0.5A/24W).	158.00
KBC-VE-DC/DC-1248-HP	PoE converter/injector. Input: 10-15VDC, Output:56V PoE (802.3af/at Gigabit, 35W).	273.00
KBC-VE-DC/DC-2448P	PoE converter/injector. Input: 18-36VDC. Output: 56V PoE (802.3at Gigabit-passive, 35W).	221.00
KBC-VE-DC/DC-2448-HP	PoE converter/injector. Input: 18-36VDC. Output: 56V PoE (802.3af/at Gigabit, 35W).	284.00
KBC-VE-DC/DC-1256P-70W	PoE converter/injector. Input: 10-60VDC. Output: 56V PoE (802.3at Gigabit, 70W).	519.00
KBC-VE-DC/DC-2456P-70W	PoE converter/injector. Input: 18-36VDC. Output: 56V PoE (802.3at Gigabit, 70W).	406.00
KBC-CV-24DC-12DC	DC/DC voltage converter/regulator. Input: 18-32 VDC. Output: 12VDC (15W, 1.25A).	74.00
KBC-CV-24DC-12DC-60W	DC/DC voltage converter/regulator. Input 24 VDC. Output: 12VDC (60W, 5A).	315.00
KBC-CV-12DC-24DC-70W	12VDC to 24VDC converter/regulator. Input: 10-15VDC, Output: 24VDC (70W max).	309.00
KBC-VWT450	400W 12/24VDC wind turbine. Auto voltage detect with charge controller. Starts producing power at 4.7mph. Rated for wind speed bursts up to 90mph, over-speed protection. Does not support LIFEPO4 batteries.	1,260.00
KBC-VE-INV375-24	24VDC to 110 VAC 375W power inverter.	956.00

Mobile Surveillance Systems (MSS)

KBC Networks offers standard and customized MSS series products for a wide variety of applications and include a combination of the following:

- Wheeled base unit with outriggers and swing arm mast
- Fixed folding base with outriggers and swing arm mast
- Removable & configurable Quick Connect Pod
- Up to three 100-watt solar panels
- Removable & configurable electronics tray
- Solar charge controller and wiring harness
- Supplemental battery charger and wiring harness
- Battery rack for 1-3 AGM or LifePO4 batteries
- Tie down kit with sandbags, spiral stakes & rope
- Lock kit for extra security
- 2" hitch mounted hydraulic lift for single unit transport
- 4G/LTE and/or wireless connectivity

Please contact KBC Networks for configuration assistance and pricing – info@kbcnetworks.com.

Networking Products

ThruLink™

Model Number	Product Description	MSRP
ThruLink		
THLK3-SC-OO-BN-MA	ThruLink Standard Capacity hardware VPN transceiver. 15Mbps, TL3 firmware. (1) LAN port, (1) WAN port, Wi-Fi.. US power adapter.	914.00
THLK3-SP-OO-BN-MA	ThruLink Standard Capacity Plus hardware VPN transceiver. 30Mbps, TL3 firmware. (1) LAN port, (1) WAN port, Wi-Fi. US power adapter.	1,103.00
THLK3-SC-CO-BN-MA	ThruLink Standard Capacity hardware VPN transceiver. 15Mbps, TL3 firmware. (1) LAN port, (1) WAN port, (1) 4G LTE modem (USA), Wi-Fi. US power adapter.	1,351.00
THLK3-SP-CO-BN-MA	ThruLink Standard Capacity Plus hardware VPN transceiver. 30Mbps, TL3 firmware. (1) LAN port, (1) WAN port, (1) 4G LTE modem (USA), Wi-Fi. US power adapter.	1,532.00
MDR20-12	DIN rail power supply for ThruLink® Standard and Standard-Plus. 20W, 12VDC out, wide temperature range.	84.00
THLK-H3-RA	High Capacity, 100Mbps, (1) LAN, (1) WAN, TL2 firmware, 1RU rackmount. US power plug.	4,032.00
THLK-H4-RA	High Capacity, 200Mbps, (1) LAN, (1) WAN, TL2 firmware, 1RU rackmount. US power plug.	4,725.00

Ethernet Switches

Model Number	Product Description	MSRP
Unmanaged Ethernet Switch		
ESUL5-DA	Industrial Ethernet switch, unmanaged, (5) 10/100Mbps copper ports. Input: 12-36VDC. DIN rail mount. US power adapter.	263.00
ESUMN8-P2-B	Industrial Ethernet switch, unmanaged, (8) 100Mbps SFP ports, (2) Gigabit SFP ports, IP40 industrial level 3 ESD protection. Input 24VDC. DIN rail mount.	542.00
Unmanaged Ethernet Switch, PoE		
ESULH4-L1-W	Industrial Ethernet switch, unmanaged, (4) 10/100Mbps IEEE802.3at PoE++ copper ports (up to 70W per port) and (1) 10/100Mbps copper port, desktop/wall-mount. 48-57VDC input. Requires power supply sold separately.	935.00
ESULS4-M1-B	Industrial Ethernet switch, unmanaged, (4) 10/100Mbps IEEE802.3at PoE+ copper ports, (1) 100Mbps SFP port, IP40 industrial level 3 ESD protection. DIN rail mount. 48-57VDC input. Requires power supply sold separately.	343.00
ESULS4-L1-B	Industrial Ethernet switch, unmanaged, (4) 10/100Mbps IEEE802.3at PoE+ copper ports, (1) 10/100Mbps copper port, IP40 industrial level 3 ESD protection. DIN rail mount. 48-57VDC input. Requires power supply sold separately.	336.00
ESUGS2-G1-B	Industrial Ethernet switch, unmanaged, (2) 10/100/1000Mbps IEEE802.3at PoE+ copper ports, (1) non-PoE 10/100/1000Mbps port, IP40 industrial level 3 ESD protection. 45-57VDC input. DIN rail/desktop/wall-mount. Requires power supply sold separately.	252.00
ESUGH2-G1-L-B	Industrial Ethernet switch, unmanaged, (2) 10/100/1000Mbps IEEE802.3bt HPoE++ copper ports, (1) non-PoE 10/100/1000Mbps port, IP40 industrial level 3 ESD protection. 9-36VDC input. DIN rail/desktop/wall-mount. Requires power supply sold separately.	430.00
ESUGS4-G1-B	Industrial Ethernet switch, unmanaged, (4) 10/100/1000Mbps IEEE802.3at PoE+ copper ports, (1) non-PoE 10/100/1000Mbps port, IP40 industrial level 3 ESD protection. 45-57VDC input. DIN rail/desktop/wall-mount. Requires power supply sold separately.	473.00
ESUGS4-G1-L-B	Industrial Ethernet switch, unmanaged, (4) 10/100/1000Mbps IEEE802.3at PoE+ copper ports, (1) non-PoE 10/100/1000Mbps port, IP40 industrial level 3 ESD protection. 9-36VDC input. DIN rail/desktop/wall-mount.	473.00
ESUGS4-P1-B	Industrial Ethernet switch, unmanaged, (4) 10/100/1000Mbps IEEE802.3at PoE+ copper ports, (1) Gigabit SFP port, IP40 industrial level 3 ESD protection. 48-57VDC input. Requires power supply sold separately. DIN rail mount.	515.00

Model Number	Product Description	MSRP
ESUGS4-P2-B	Industrial Ethernet switch, unmanaged, (4) 10/100/1000Mbps IEEE 802.3at PoE+ copper ports, (2) Gigabit SFP ports. 48~57VDC input. Requires power supply sold separately. DIN rail/desktop/wall-mount.	578.00
ESUGH4-P2-B	Industrial Ethernet switch, unmanaged, (4) 10/100/1000Mbps IEEE802.3bt PoE++ copper ports, (2) gigabit SFP ports. 52-57VDC input. DIN rail/desktop/wall-mount. Requires power supply sold separately.	690.00
ESUGS6-P1-L-B	Industrial Ethernet switch, unmanaged, (6) 10/100/1000M IEEE802.3at PoE+ copper ports (total POE budget 160W), (1) Gigabit SFP port, IP40 industrial level 3 ESD protection. DIN rail mount. 24VDC input. Requires power supply sold separately.	746.00
ESUGS8-B	Industrial Ethernet switch, unmanaged, (8) 10/100/1000Mbps IEEE802.3at PoE+ ports, IP40 industrial level 3 ESD protection. 48~57VDC input. DIN rail mount. Requires power supply sold separately.	599.00
ESUGS8-P2-B	Industrial Ethernet switch, unmanaged, (8) 10/100/1000Mbps IEEE802.3at PoE+ ports, (2) Gigabit SFP ports, IP40 industrial level 3 ESD protection. 48~57VDC input. DIN rail mount. Requires power supply sold separately.	735.00
ESUGS8-P2-L-B	Industrial Ethernet switch, unmanaged, (8) 10/100/1000M IEEE802.3at PoE++ copper ports (total PoE budget 160W), (2) Gigabit SFP ports, IP40 industrial level 3 ESD protection. DIN rail mount. 24VDC input. Requires power supply sold separately.	954.00
Managed Ethernet Switch, Non-PoE		
ESMPN24-C4-RAN-B	Industrial Ethernet switch, Layer 2 managed, (24) Gigabit SFP ports, (4) Gigabit combo ports. 100~240VAC, 50/60Hz. US power plug. 1RU rack mount.	1,924.00
ESMPN24-C4-RAR-B	Industrial Ethernet switch, Layer 2 managed, (24) Gigabit SFP ports, (4) Gigabit combo ports. Redundant power supply. 100~240VAC, 50/60Hz. US power plug. 1RU rack mount.	2,031.00
Managed Ethernet Switch, PoE		
ESMGS4-P2-B	Industrial Ethernet switch, Layer 2 managed, (4) 10/100/1000Mbps IEEE802.3at PoE+ copper ports, (2) Gigabit SFP ports. DIN rail/wall mount. 48~57VDC input. Requires power supply sold separately.	735.00
ESMGS8-C2-B	Industrial Ethernet switch, Layer 2 managed, (8) 10/100/1000Mbps IEEE802.3at PoE+ copper ports, (2) Gigabit combo ports. DIN rail/wall mount. 48~57VDC input. Requires power supply sold separately.	1,040.00
ESMGS8-P4-B	Industrial Ethernet switch, Layer 2 managed, (8) 10/100/1000Mbps IEEE802.3at PoE+ copper ports, 240W PoE budget, (4) Gigabit SFP ports. 48~57VDC input. Requires power supply sold separately. DIN rail/desktop/wall-mount.	1,040.00
ESMGS8-P2-L-B	Industrial Ethernet switch, Layer 2 managed, (8) 10/100/1000Mbps IEEE802.3at PoE+ copper ports, (2) Gigabit SFP ports. 24VDC input. DIN rail/desktop/wall-mount.	1,334.00
ESMGS16-P2-RA	Industrial Ethernet switch, Layer 2 managed, (16) 10/100/1000Mbps IEEE802.3at PoE+ copper ports, 480W power budget, (2) Gigabit SFP ports. 1RU rack mount. 100~240VAC, 50/60Hz. US power plug.	1,460.00
ESMGS24-P4-RAS	Industrial Ethernet switch, Layer 2 managed, (24) 10/100/1000Mbps IEEE802.3af PoE copper ports, 360W power budget, (4) Gigabit SFP ports. 1RU rack mount. 100~240VAC, 50/60Hz. US power plug.	1,460.00
ESMGS24-P4-RA	Industrial Ethernet switch, Layer 2 managed, (24) 10/100/1000Mbps IEEE802.3at PoE+ Ethernet ports, 720W PoE budget, (4) shared Gigabit SFP ports. 1RU rack mount. 100~240VAC, 50/60Hz. US power plug.	1,670.00
ESMGS24-N4-RAN-B	Industrial Ethernet switch, Layer 2 managed, (24) 10/100/1000Mbps IEEE802.3at PoE+ Ethernet ports, 480W PoE budget, (4) 10GB SFP ports (user interface selectable to 1GB). 1RU rack mount. 100~240VAC, 50/60Hz. US power plug.	2,583.00

Ethernet Switch Power Supplies

Model Number	Product Description	MSRP
Power Supplies		
GST18A12	18W AC-DC industrial power plug. 90-264VAC in, 12VDC, 1.5A out, -30°C to +70°C (-22°F to 158°F) operating temperature range.	32.00
GST60A48	60W AC-DC industrial power plug. 90-264VAC in, 48VDC, 1.25A out, -30°C to +70°C (-22°F to 158°F) operating temperature range.	79.00
MDR-60-12	60W DIN rail power supply for 12VDC input industrial IP devices.	84.00
MDR-60-24	60W DIN rail power supply for 24VDC input industrial IP devices.	84.00
EDR-75-48	75W DIN rail power supply for PoE switch. 48~55VDC, 1.5A out, -20°C to +70°C (-4°F to 158°F) operating temperature range.	105.00
NDR-75-48	75W DIN rail power supply for PoE switch. 48~55VDC, 1.5A out, -20°C to +70°C (-4°F to 158°F) operating temperature range.	105.00
NDR-120-48	120W DIN rail power supply for PoE switch. 47~53VDC, 2.5A out, -10°C to +60°C (14°F to 140°F) operating temperature range.	147.00
SDR120-48	120W DIN rail power supply for PoE switch. 47~55VDC out, -25°C to +70°C (-13°F to 158°F) operating temperature range.	315.00
GST160A48	160W AC-DC industrial power adapter. 90-264VAC in, 48VDC out, -30°C to +70°C (-22°F to 158°F) operating temperature range.	231.00
NDR-240-48	240W DIN rail power supply for PoE switch. 48~55VDC out, -20°C to +70°C (-4°F to 158°F) operating temperature range.	252.00
SDR240-48	240W DIN rail power supply for PoE switch. 48~55VDC out, -25°C to +70°C (-13°F to 158°F) operating temperature range.	504.00
NDR-480-48	480W DIN rail power supply for PoE switch. 48~55VDC out, -20°C to +70°C (-4°F to 158°F) operating temperature range.	515.00
SDR480-48	480W DIN rail power supply for PoE switch. 48~55VDC out, -25°C to +70°C (-13°F to 158°F) operating temperature range.	830.00

SFP Modules

Model Number	Product Description	MSRP
SFP Modules, RJ-45 Electrical		
SFPV-GT	Electrical SFP module. 1000Mbps, 0~100m range, RJ-45 Ethernet connector.	168.00
SFP Modules, 100Base-FX, 2 Fibers		
SFP-MM2-D	Optical SFP module with DDM. 100Base-FX, 2 multi-mode fibers, 1310nm, 12dB optical budget, 0~2Km range, duplex LC connector.	84.00
SFP-MS2-AD	Optical SFP module with DDM. 100Base-FX, 2 single mode fibers, 1310nm, 12dB optical budget, 0~20Km range, duplex LC connector.	84.00
SFP-MS2-BD	Optical SFP module with DDM. 100Base-FX, 2 single mode fibers, 1310nm, 25dB optical budget, 0~40Km range, duplex LC connector.	105.00
SFP Modules, 100Base-FX, 1 Fiber		
SFPV-MM1A-D	Optical SFP module with DDM. 100Base-FX, 1 multi-mode fiber, 1310nm/1550nm, 12dB optical budget, 0~2Km range, LC connector. To be paired with SFP-MM1B-D.	105.00
SFPV-MM1B-D	Optical SFP module with DDM. 100Base-FX, 1 multi-mode fiber, 1550nm/1310nm, 12dB optical budget, 0~2Km range, LC connector. To be paired with SFP-MM1A-D.	105.00
SFP-MS1A-AD	Optical SFP module with DDM. 100Base-FX, 1 single mode fiber, 1310nm/1550nm, 15dB optical budget, 0~20Km range, LC connector. To be paired with SFP-MS1B-AD.	105.00
SFP-MS1B-AD	Optical SFP module with DDM. 100Base-FX, 1 single mode fiber, 1550nm/1310nm, 15dB optical budget, 0~20Km range, LC connector. To be paired with SFP-MS1A-AD.	105.00
SFP-MS1A-BD	Optical SFP module with DDM. 100Base-FX, 1 single mode fiber, 1310nm/1550nm, 25dB optical budget, 0~40Km range, LC connector. To be paired with SFP-MS1B-BD.	221.00
SFP-MS1B-BD	Optical SFP module with DDM. 100Base-FX, 1 single mode fiber, 1550nm/1310nm, 25dB optical budget, 0~40Km range, LC connector. To be paired with SFP-MS1A-BD.	221.00
SFP-MS1A-CD	Optical SFP module with DDM. 100Base-FX, 1 single mode fiber, 1310nm/1550nm, 0~80Km range, LC connector. To be paired with SFP-MS1B-BD.	294.00
SFP-MS1B-CD	Optical SFP module with DDM. 100Base-FX, 1 single mode fiber, 1550nm/1310nm, 0~80Km range, LC connector. To be paired with SFP-MS1A-BD.	630.00
SFP Modules, 1000Mbps, 2 Fibers		
SFP-GM2-D	Optical SFP module with DDM. 1Gbps, 2 multi-mode fibers, 850nm, 8dB optical budget, 0~500m range with 50/125µ fiber (220m range with 62.50/125µ fiber), duplex LC connector.	126.00
SFP-GS2-AD	Optical SFP module with DDM. 1Gbps, 2 single mode fibers, 1310nm, 11dB optical budget, 0~20Km range, duplex LC connector.	126.00
SFP-GS2-BD	Optical SFP module with DDM. 1Gbps, 2 single mode fibers, 1310nm, 11dB optical budget, 0~40Km range, duplex LC connector.	179.00
SFP Modules, 1000Mbps, 1 Fiber		
SFP-GS1A-AD	Optical SFP module with DDM. 1Gbps, 1 single mode fiber, 1310nm/1550nm, 11dB optical budget, 0~20Km range, LC connector. To be paired with SFP-GS1B-AD.	126.00
SFP-GS1B-AD	Optical SFP module with DDM. 1Gbps, 1 single mode fiber, 1550nm/1310nm, 11dB optical budget, 0~20Km range, LC connector. To be paired with SFP-GS1A-AD.	210.00
SFP-GS1A-BD	Optical SFP module with DDM. 1Gbps, 1 single mode fiber, 1310nm/1550nm, 19dB optical budget, 0~40Km range, duplex LC connector. To be paired with SFP-GS1B-BD.	378.00
SFP-GS1B-BD	Optical SFP module with DDM. 1Gbps, 1 single mode fiber, 1550nm/1310nm, 19dB optical budget, 0~40Km range, duplex LC connector. To be paired with SFP-GS1A-BD.	378.00
SFP-GS1A-CD	Optical SFP module with DDM. 1Gbps, 1 single mode fiber, 1310nm/1550nm, 19dB optical budget, 0~80Km range, duplex LC connector. To be paired with SFP-GS1B-CD.	536.00
SFP-GS1B-CD	Optical SFP module with DDM. 1Gbps, 1 single mode fiber, 1550nm/1310nm, 19dB optical budget, 0~80Km range, duplex LC connector. To be paired with SFP-GS1A-CD.	536.00

Model Number	Product Description	MSRP
SFP Modules, 10G, 2 Fibers		
SFP-NM2-D	Optical SFP module with DDM. 10Gbps, 2 multi-mode fibers, 850nm, 0~300m range, duplex LC connector.	252.00
SFP-NS2-ND	Optical SFP module with DDM. 10Gbps, 2 single mode fibers, 1310nm, 0~10Km range, duplex LC connector.	288.00
SFP-NS2-AD	Optical SFP module with DDM. 10Gbps, 2 single mode fibers, 1310nm, 0~20Km range, duplex LC connector.	301.00
SFP Modules, 10G, 1 Fiber		
SFP-NS1A-ND	Optical SFP module with DDM. 10Gbps, 1 single mode fiber, 1270nm/1330nm, 0~10Km range, LC connector. To be paired with SFP-NS1B-ND.	441.00
SFP-NS1B-ND	Optical SFP module with DDM. 10Gbps, 1 single mode fiber, 1330nm/1270nm, 0~10Km range, LC connector. To be paired with SFP-NS1A-ND.	441.00
SFP-NS1A-AD	Optical SFP module with DDM. 10Gbps, 1 single mode fiber, 1270nm/1330nm, 0~20Km range, LC connector. To be paired with SFP-NS1B-AD.	499.00
SFP-NS1B-AD	Optical SFP module with DDM. 10Gbps, 1 single mode fiber, 1330nm/1270nm, 0~20Km range, LC connector. To be paired with SFP-NS1A-AD.	499.00

Extended Ethernet Kits

Model Number	Product Description	MSRP
eCopper™ Extended Ethernet Kits over Coax, PoE		
EECF-1KT-B	eCopper® kit for 1 PoE camera. 10/100Mbps auto-sensing PSE Ethernet over Coax kit consisting of (1) EECF1-LS1-T-MN-B transmitter, (1) EECF1-LN1-R-MN-B receiver, and (1) GST60A48 power supply.	481.00
EECF-2KT-LB	eCopper® kit for 2 PoE cameras. 10/100Mbps auto-sensing PSE Ethernet over Coax kit consisting of (2) EECF1-LS1-T-MN-B transmitters (1) EECF1-LN1-R-MN-B receiver, (1) BNC splitter, and (1) GST60A48 power supply. System limited to 50Mbps of overall throughput.	685.00
EECF-2KT-B	eCopper® kit for 2 PoE cameras. 10/100Mbps auto-sensing PSE Ethernet over Coax kit consisting of (2) EECF1-LS1-T-MN-B transmitters (1) EECF4-DN1-R-WN-B receiver, and (1) GST160A48 power supply.	1,092.00
EECF-3KT-B	eCopper® kit for 3 PoE cameras. 10/100Mbps auto-sensing PSE Ethernet over Coax kit consisting of (3) EECF1-LS1-T-MN-B transmitters (1) EECF4-DN1-R-WN-B receiver, and (1) GST160A48 power supply.	1,286.00
EECF-4KT-B	eCopper® kit for 4 PoE cameras. 10/100Mbps auto-sensing PSE Ethernet over Coax kit consisting of (4) EECF1-LS1-T-MN-B transmitters (1) EECF4-DN1-R-WN-B receiver, and (1) GST160A48 power supply.	1,480.00
eCopper™ Extended Ethernet Kits over Coax, Non-PoE		
EECN-1KTA-B	eCopper® kit for 1 non-PoE camera, consisting of (1) EECN1-LN1-T-MA-B transmitter and (1) EECN1-LN1-R-MN-B receiver. US power adapters.	350.00
eCopper™ Extended Ethernet Kits over UTP, PoE		
EERF-1KT-B	eCopper® kit for 1 PoE camera. 10/100Mbps auto-sensing PSE Ethernet over twisted pair kit consisting of (1) EERF1-LS1-T-MN-B transmitter, (1) EERF1-LN1-R-MN-B receiver, and (1) GST60A48 power supply.	481.00
EERF-2KT-B	eCopper® kit for 2 PoE cameras. 10/100Mbps auto-sensing PSE Ethernet over twisted pair kit consisting of (2) EERF1-LS1-T-MN-B transmitters (1) EERF4-DN1-R-WN-B receiver, and (1) GST160A48 power supply.	1,092.00
EERF-3KT-B	eCopper® kit for 3 PoE cameras. 10/100Mbps auto-sensing PSE Ethernet over twisted pair kit consisting of (3) EERF1-LS1-T-MN-B transmitters (1) EERF4-DN1-R-WN-B receiver, and (1) GST160A48 power supply.	1,286.00
EERF-4KT-B	eCopper® kit for 4 PoE cameras. 10/100Mbps auto-sensing PSE Ethernet over twisted pair kit consisting of (4) EERF1-LS1-T-MN-B transmitters (1) EERF4-DN1-R-WN-B receiver, and (1) GST160A48 power supply.	1,480.00
eCopper™ Extended Ethernet Kits over UTP, Non-PoE		
EERN-1KTA-B	eCopper® kit for 1 non-PoE camera. Consisting of (1) EERN1-LN1-T-MA-B transmitter, (1) EERN1-LN1-R-MA-B receiver. US power adapters.	350.00

Extended Ethernet Modules

Model Number	Product Description	MSRP
eCopper™ Extended Ethernet Modules over Coax		
EECF1-LS1-T-IN-B	1-ch industrial Ethernet over coax transmitter. EoC/PoC/PoE+, (1) Ethernet flying lead port, 10/100Mbps auto-sensing, 30W end-span 802.3at PoE+. (1) coax flying lead port, EoC/PoC, powered from EECF series receiver. Compact module with Velcro fastener. Special order only. Contact KBC Networks for lead time.	194.00
EECF1-LS1-T-MN-B	1-ch industrial Ethernet over coax transmitter. EoC/PoC/PoE+, (1) fixed Ethernet port, 10/100Mbps auto-sensing, 30W end-span 802.3at PoE+. (1) fixed coax port, EoC/PoC, powered from EECF series receiver. Compact module.	194.00
EECF1-LN1-R-MN-B	1-ch industrial Ethernet over coax receiver. EoC/PoC/PoE+, (1) fixed Ethernet port, 10/100Base-T auto-sensing. (1) fixed coax port, providing EoC/PoC. Input 48~57VDC. Compact module. Requires power supply sold separately.	208.00

Model Number	Product Description	MSRP
EECF1-LS4-T-WN-B	4-ch industrial Ethernet over coax transmitter with PoC/PoE+ management, 1 fixed BNC, 4*10/100M Base-T RJ-45 ports with PoE+, 30W PoC input or optional 48~57VDC power supply sold separately. Compact module with clip mount.	473.00
EECF4-DN1-R-WN-B	4-port industrial Ethernet over Coax receiver. 4 BNC ports with EoC/PoC up to 700m, EoC/PoE+ up to 300m. (1) 10/100/1000Mbps Ethernet port, (1) Gigabit SFP port. Input 48~57VDC. Desktop/wall mount. Requires power supply sold separately.	473.00
EECF8-GN3-R-RA-B	8-port industrial Ethernet over Coax receiver. 8 BNC ports with EoC/PoC up to 700m, EoC/PoE+ up to 300m. (3) 10/100/1000Mbps Ethernet ports. Input 48~57VDC. 1RU rack mount. 100~240VAC, 50/60Hz, US power adapter.	1,418.00
EECF16-GN3-R-RA-B	16-port industrial Ethernet over Coax receiver. 16 BNC ports with EoC/PoC up to 700m, EoC/PoE+ up to 300m. (3) 10/100/1000Mbps Ethernet ports. Input 48~57VDC. 1RU rack mount. 100~240VAC, 50/60Hz, US power adapter.	2,153.00
EECN1-LN1-T-MA-B	1-ch non-PoE industrial Ethernet over coax non-PoE transmitter, (1) fixed BNC and (1) fixed RJ-45 Ethernet port, 10/100Mbps auto-sensing. Input 12~24VDC. Compact module with clip mount. US power adapter.	175.00
EECN1-LN1-R-MA-B	1-ch non-PoE industrial Ethernet over coax non-PoE receiver, (1) fixed BNC and (1) fixed RJ-45 Ethernet port, 10/100Mbps auto-sensing. Input 12~24VDC. Compact module with clip mount. US power adapter.	175.00
eCopper™ Extended Ethernet Modules over UTP		
EERF1-LS1-T-IN-B	1-ch industrial Ethernet over UTP transmitter. EoU/PoW/PoE+, (1) Ethernet port, 10/100Mbps auto-sensing, 30W end-span 802.3at PoE+. (1) flying lead UTP port, EoU/PoW, powered from EERF series receiver. Compact module with Velcro fastener. Special order only. Contact KBC Networks for lead time.	194.00
EERF1-LS1-T-MN-B	1-ch industrial Ethernet over UTP transmitter. EoU/PoW/PoE+, (1) fixed Ethernet port, 10/100Mbps auto-sensing, 30W end-span 802.3at PoE+. (1) fixed UTP port, EoU/PoW, powered from EERF series receiver.	194.00
EERF1-LN1-R-MN-B	1-ch industrial Ethernet over UTP receiver. EoU/PoW/PoE+, (1) fixed Ethernet port, 10/100Base-T auto-sensing. (1) fixed UTP port, providing EoU/PoW. Input 48~57VDC. Requires power supply sold separately.	208.00
EERF4-DN1-R-WN-B	4-port industrial Ethernet over UTP receiver. 4 UTP ports with EoU/PoW up to 400m. (1) 10/100/1000Mbps Ethernet port, (1) Gigabit SFP port. Input 48~57VDC. Desktop/wall mount. Requires power supply sold separately.	473.00
EERF8-GN3-R-RA-B	8-port industrial Ethernet over UTP receiver. 8 UTP ports with EoU/PoW up to 400m. (3) 10/100/1000Mbps Ethernet ports. Input 48~57VDC. 1RU rack mount. 100~240VAC, 50/60Hz, US power adapter.	1,418.00
EERF16-GN3-R-RA-B	16-port industrial Ethernet over UTP receiver. 16 UTP ports with EoU/PoW up to 400m. (3) 10/100/1000Mbps Ethernet ports. Input 48~57VDC. 1RU rack mount. 100~240VAC, 50/60Hz, US power adapter.	2,153.00
EEEN1-LN1-T-MA-B	1-ch non-PoE industrial Ethernet over UTP transmitter. (1) fixed Ethernet port, 10/100Mbps auto-sensing. (1) RJ-45 UTP port. Input 12~24VDC. Compact module with clip mount. US power adapter.	175.00
EEEN1-LN1-R-MA-B	1-ch non-PoE industrial Ethernet over UTP receiver. (1) fixed Ethernet port, 10/100Mbps auto-sensing. (1) UTP port. Input 12~24VDC. Compact module with clip mount. US power adapter.	175.00
eCopper® Chassis Panel for Single Channel Units		
FR1-08-NN-B	1RU 19" passive chassis card cage for up to (8) stand-alone single channel EoC/EoU transmitter/receiver, without power supply.	105.00

Fiber Optic Ethernet Media Converters

Model Number	Product Description	MSRP
Ethernet Media Converters – 10/100Mbps, Multi-Mode		
MCLN1-M2N-WSA-B	10/100Mbps Ethernet LAN fiber optic media converter, 2 fibers, 1310nm multi-mode, 12dB optical loss budget. 2Km range. -40°C to 75°C (-40°F to 167°F) operating temp. 12VDC, <3W. Wall mount, ST connector, US power adapter.	179.00
MCLN1-M1A-WSA-B	10/100Mbps Ethernet LAN fiber optic media converter "A" side, 1 fiber, 1310/1550nm multi-mode, 12dB optical loss budget. 2Km range. -40°C to 75°C (-40°F to 167°F) operating temp. 12VDC, <3W. Wall mount, ST connector, US power adapter.	200.00
MCLN1-M1B-WSA-B	10/100Mbps Ethernet LAN fiber optic media converter "B" side, 1 fiber, 1550/1310nm multi-mode, 12dB optical loss budget. 2Km range. -40°C to 75°C (-40°F to 167°F) operating temp. 12VDC, <3W. Wall mount, ST connector, US power adapter.	200.00
MCLN2-M2N-WSA-B	2-port 10/100Mbps Ethernet LAN fiber optic media converter, 2 fibers, 1310nm multi-mode, 12dB optical loss budget. 2Km range. -40°C to 75°C (-40°F to 167°F) operating temp. 12VDC, <3W. Wall mount, ST connector, US power adapter.	200.00
MCLN2-M1A-WSA-B	2-port 10/100Mbps Ethernet LAN fiber optic media converter "A" side, 1 fiber, 1310/1550nm multi-mode, 12dB optical loss budget. 2Km range. -40°C to 75°C (-40°F to 167°F) operating temp. 12VDC, <3W. Wall mount, ST connector, US power adapter.	221.00
MCLN2-M1B-WSA-B	2-port 10/100Mbps Ethernet LAN fiber optic media converter "B" side, 1 fiber, 1550/1310nm multi-mode, 12dB optical loss budget. 2Km range. -40°C to 75°C (-40°F to 167°F) operating temp. 12VDC, <3W. Wall mount, ST connector, US power adapter.	221.00
MCLS1-M2N-WSN-B	10/100Mbps Ethernet LAN fiber optic PoE media converter, 2 fibers, 1310nm multi-mode, 12dB optical loss budget. 2Km range. Compatible with MCLN1-M2N-xxx. -40°C to 75°C (-40°F to 167°F) operating temp. 48VDC, <3W. Wall mount, ST connector, Requires power supply sold separately.	294.00
MCLS1-M1A-WSN-B	10/100Mbps Ethernet LAN fiber optic PoE media converter "A" side, 1 fiber, 1310/1550nm multi-mode, 12dB optical loss budget. 2Km range. Compatible with MCLN1-M1B-xxx. -40°C to 75°C (-40°F to 167°F) operating temp. 48VDC, <3W. Wall mount, ST connector, Requires power supply sold separately.	294.00
Ethernet Media Converters – 10/100Mbps, Single Mode		
MCLN1-S2N-WSA-B	10/100Mbps Ethernet LAN fiber optic media converter, 2 fibers, 1310nm single mode, 12dB optical loss budget. 20Km range. -40°C to 75°C (-40°F to 167°F) operating temp. 12VDC, <3W. Wall mount, ST connector, US power adapter.	189.00
MCLN1-S1A-WSA-B	10/100Mbps Ethernet LAN fiber optic media converter "A" side, 1 fiber, 1310/1550nm single mode, 12dB optical loss budget. 20Km range. -40°C to 75°C (-40°F to 167°F) operating temp. 12VDC, <3W. Wall mount, ST connector, US power adapter.	210.00
MCLN1-S1B-WSA-B	10/100Mbps Ethernet LAN fiber optic media converter "B" side, 1 fiber, 1550/1310nm single mode, 12dB optical loss budget. 20Km range. -40°C to 75°C (-40°F to 167°F) operating temp. 12VDC, <3W. Wall mount, ST connector, US power adapter.	210.00
MCLN2-S2N-WSA-B	2-port 10/100Mbps Ethernet LAN fiber optic media converter, 2 fibers, 1310nm single mode, 12dB optical loss budget. 20Km range. -40°C to 75°C (-40°F to 167°F) operating temp. 12VDC, <3W. Wall mount, ST connector, US power adapter.	210.00
MCLN2-S1A-WSA-B	2-port 10/100Mbps Ethernet LAN fiber optic media converter "A" side, 1 fiber, 1310/1550nm single mode, 12dB optical loss budget. 20Km range. -40°C to 75°C (-40°F to 167°F) operating temp. 12VDC, <3W. Wall mount, ST connector, US power adapter.	231.00
MCLN2-S1B-WSA-B	2-port 10/100Mbps Ethernet LAN fiber optic media converter "B" side, 1 fiber, 1550/1310nm single mode, 12dB optical loss budget. 20Km range. -40°C to 75°C (-40°F to 167°F) operating temp. 12VDC, <3W. Wall mount, ST connector, US power adapter.	231.00
MCLS1-S2N-WSN-B	10/100Mbps Ethernet LAN fiber optic PoE media converter, 2 fibers, 1310nm single mode, 12dB optical loss budget. 20Km range. Compatible with MCLN1-S2N-xxx. -40°C to 75°C (-40°F to 167°F) operating temp. 48VDC, <3W. Wall mount, ST connector, Requires power supply sold separately.	294.00

Model Number	Product Description	MSRP
MCLS1-S1A-WSN-B	10/100Mbps Ethernet LAN fiber optic PoE media converter "A" side, 1 fiber, 1310/1550nm single mode, 12dB optical loss budget. 20Km range. Compatible with MCLN1-S1B-xxx. -40°C to 75°C (-40°F to 167°F) operating temp. 48VDC, <3W. Wall mount, ST connector, Requires power supply sold separately.	294.00
Ethernet Media Converters - 10/100Mbps SFP		
MCLN1-P1N-WNA-B	Ethernet fiber optic media converter, (1) 10/100Mbps LAN port, (1) SFP port. -40°C to 75°C (-40°F to 167°F) operating temp. 12VDC, <3W. Wall mount, US power adapter.	158.00
MCLN2-P1N-WNA-B	Ethernet fiber optic media converter, (2) 10/100Mbps LAN ports, (1) SFP port. -40°C to 75°C (-40°F to 167°F) operating temp. 12VDC, <3W. Wall mount, US power adapter.	179.00
MCLS1-P1N-WNN-B	Ethernet fiber optic media converter, (1) 10/100Mbps PoE+ LAN port, (1) SFP port. -40°C to 75°C (-40°F to 167°F) operating temp. 48-57VDC input, Wall mount, Requires power supply sold separately.	252.00
Ethernet Media Converters - 10/100/1000Mbps, Multi-Mode		
MCGN1-M2N-WSA-B	10/100/1000Mbps Ethernet LAN fiber optic media converter, 2 fibers, 1310nm multi-mode, 12dB optical loss budget. 500m range. -40°C to 75°C (-40°F to 167°F) operating temp. 12VDC, <3W. Wall mount, ST connector, US power adapter.	284.00
MCGN1-M1A-WSA-B	10/100/1000Mbps Ethernet LAN fiber optic media converter "A" side, 1 fiber, 1310/1550nm multi-mode, 12dB optical loss budget. 500m range. -40°C to 75°C (-40°F to 167°F) operating temp. 12VDC, <3W. Wall mount, ST connector, US power adapter.	305.00
MCGN1-M1B-WSA-B	10/100/1000Mbps Ethernet LAN fiber optic media converter "B" side, 1 fiber, 1550/1310nm multi-mode, 12dB optical loss budget. 500m range. -40°C to 75°C (-40°F to 167°F) operating temp. 12VDC, <3W. Wall mount, ST connector, US power adapter.	305.00
MCGN2-M2N-WSA-B	2-port 10/100/1000Mbps Ethernet LAN fiber optic media converter, 2 fibers, 1310nm multi-mode, 12dB optical loss budget. 500m range. -40°C to 75°C (-40°F to 167°F) operating temp. 12VDC, <3W. Wall mount, ST connector, US power adapter.	305.00
Ethernet Media Converters - 10/100/1000Mbps, Single Mode		
MCGN1-S2N-WSA-B	10/100/1000Mbps Ethernet LAN fiber optic media converter, 2 fibers, 1310nm single mode, 12dB optical loss budget. 20Km range. -40°C to 75°C (-40°F to 167°F) operating temp. 12VDC, <3W. Wall mount, ST connector, US power adapter.	294.00
MCGN1-S1A-WSA-B	10/100/1000Mbps Ethernet LAN fiber optic media converter "A" side, 1 fiber, 1310/1550nm single mode, 12dB optical loss budget. 20Km range. -40°C to 75°C (-40°F to 167°F) operating temp. 12VDC, <3W. Wall mount, ST connector, US power adapter.	315.00
MCGN1-S1B-WSA-B	10/100/1000Mbps Ethernet LAN fiber optic media converter "B" side, 1 fiber, 1550/1310nm single mode, 12dB optical loss budget. 20Km range. -40°C to 75°C (-40°F to 167°F) operating temp. 12VDC, <3W. Wall mount, ST connector, US power adapter.	315.00
MCGN2-S2N-WSA-B	2-port 10/100/1000Mbps Ethernet LAN fiber optic media converter, 2 fibers, 1310nm single mode, 12dB optical loss budget. 20Km range. -40°C to 75°C (-40°F to 167°F) operating temp. 12VDC, <3W. Wall mount, ST connector, US power adapter.	315.00
Ethernet Media Converters - 10/100/1000Mbps SFP		
MCGN1-P1N-WNA-B	Ethernet fiber optic media converter, (1) 10/100/1000Mbps LAN port, (1) SFP port. -40°C to 75°C (-40°F to 167°F) operating temp. 12VDC, <3W. Wall mount, US power adapter.	263.00
MCGN2-P1N-WNA-B	Ethernet fiber optic media converter, (2) 10/100/1000Mbps LAN ports, (1) SFP port. -40°C to 75°C (-40°F to 167°F) operating temp. 12VDC, <3W. Wall mount, US power adapter.	284.00
2RU Rack Mount for MCLN/MCGN Series		
FR2-12-NNN-B	2RU 19" passive module rack for up to 12 MCLN/MCGN series media converter modules.	105.00
FR2-16-ABN-B	2RU 19" chassis card cage for powering up to 16 MCLN/MCGN series media converter modules. 0°C to 50°C (32°F to 122°F) operating temp. US power plug.100-120VAC, 50/60Hz.	735.00
FR2-15-ABP-B	2RU 19" chassis card cage with redundant power supply for powering up to 15 MCLN/MCGN series media converter modules. 0°C to 50°C (32°F to 122°F) operating temp. US power plug.100-120VAC, 50/60Hz.	840.00

Model Number	Product Description	MSRP
Ethernet Media Converters – 10/100Mbps, Multi-Mode		
FTL1-M2-MSA	100Mbps Ethernet LAN fiber optic media converter, 2 fibers, 1310nm multi-mode, 17dB optical loss budget. 4Km range. Compact module, ST connector, US power adapter.	315.00
FTL1-M2-BS	100Mbps Ethernet LAN fiber optic media converter, 2 fibers, 1310nm multi-mode, 17dB optical loss budget. 4Km range. 3RU chassis card, ST connector, US power adapter.	315.00
FTL1-M2-MCA	100Mbps Ethernet LAN fiber optic media converter, 2 fibers, 1310nm multi-mode, 17dB optical loss budget. 4Km range. Compact module, SC connector. US power adapter.	315.00
FTL1-M2-MLA	100Mbps Ethernet LAN fiber optic media converter, 2 fibers, 1310nm multi-mode, 17dB optical loss budget. 4Km range. Compact module, LC connector. US power adapter.	315.00
FTL1-M1A-MSA	10/100Mbps Ethernet LAN fiber optic media converter "A" side, 1 fiber, 1310/1550nm multi-mode, 17dB optical loss budget. 4Km range. Compact module, ST connector, US power adapter.	494.00
FTL1-M1B-MSA	10/100Mbps Ethernet LAN fiber optic media converter "B" side, 1 fiber, 1310/1550nm multi-mode, 17dB optical loss budget. 4Km range. Compact module, ST connector, US power adapter.	494.00
FTL1-M1B-BS	10/100Mbps Ethernet LAN fiber optic media converter "B" side, 1 fiber, 1310/1550nm multi-mode, 17dB optical loss budget. 4Km range. 3RU chassis card, ST connector, US power adapter.	494.00
FTL1-M1B-MCA	10/100Mbps Ethernet LAN fiber optic media converter "B" side, 1 fiber, 1310/1550nm multi-mode, 17dB optical loss budget. 4Km range. Compact module, SC connector. US power adapter.	494.00
FTL1-M1B-MLA	10/100Mbps Ethernet LAN fiber optic media converter "B" side, 1 fiber, 1310/1550nm multi-mode, 17dB optical loss budget. 4Km range. Compact module, LC connector. US power adapter.	494.00
FTL2-M2-BS	10/100Mbps dual module Ethernet LAN fiber optic transceiver, 2 fibers, 1310/1550nm multi-mode, 17dB optical loss budget. 4Km range. 3RU chassis card, ST connector,	987.00
Ethernet Media Converters – 10/100Mbps, Single Mode		
FTL1-S2-MSA	100Mbps Ethernet LAN fiber optic media converter, 2 fibers, 1310nm single mode, 20dB optical loss budget. 40Km range. Compact module, ST connector, US power adapter.	378.00
FTL1-S2-BS	100Mbps Ethernet LAN fiber optic media converter, 2 fibers, 1310nm single mode, 20dB optical loss budget. 40Km range. 3RU chassis card, ST connector, US power adapter.	378.00
FTL1-S2-MCA	100Mbps Ethernet LAN fiber optic media converter, 2 fibers, 1310nm single mode, 20dB optical loss budget. 40Km range. Compact module, SC connector. US power adapter.	378.00
FTL1-S2-MLA	100Mbps Ethernet LAN fiber optic media converter, 2 fibers, 1310nm single mode, 20dB optical loss budget. 40Km range. Compact module, LC connector. US power adapter.	378.00
FTL1-S1A-MSA	100Mbps Ethernet LAN fiber optic media converter "A" side, 1 fiber, 1310/1550nm single mode, 20dB optical loss budget. 30Km range. Compact module, ST connector, US power adapter.	578.00
FTL1-S1B-MSA	100Mbps Ethernet LAN fiber optic media converter "B" side, 1 fiber, 1310/1550nm single mode, 20dB optical loss budget. 30Km range. Compact module, ST connector, US power adapter.	578.00
FTL1-S1B-BS	100Mbps Ethernet LAN fiber optic media converter "B" side, 1 fiber, 1310/1550nm single mode, 20dB optical loss budget. 30Km range. 3RU chassis card, ST connector, US power adapter.	578.00
FTL1-S1B-MCA	100Mbps Ethernet LAN fiber optic media converter "B" side, 1 fiber, 1310/1550nm single mode, 20dB optical loss budget. 30Km range. Compact module, SC connector. US power adapter.	578.00
FTL1-S1B-MLA	100Mbps Ethernet LAN fiber optic media converter "B" side, 1 fiber, 1310/1550nm single mode, 20dB optical loss budget. 30Km range. Compact module, LC connector. US power adapter.	578.00
FTL2-S2-BS	100Mbps dual module Ethernet LAN fiber optic transceiver, 2 fibers, 1310/1550nm single mode, 20dB optical loss budget. 30Km range. 3RU chassis card, ST connector,	1,155.00

Model Number	Product Description	MSRP
Ethernet Media Converters - 1000Mbps, Multi-Mode		
MCG1-M2-MSA	1000Mbps Ethernet LAN fiber optic media converter, 2 fibers, 1310nm multi-mode, 17dB optical loss budget. 2Km range. Compact module, ST connector, US power adapter.	630.00
MCG1-M2-BS	1000Mbps Ethernet LAN fiber optic media converter, 2 fibers, 1310nm multi-mode, 17dB optical loss budget. 2Km range. 3RU chassis card, ST connector, US power adapter.	630.00
MCG1-M2-MCA	1000Mbps Ethernet LAN fiber optic media converter, 2 fibers, 1310nm multi-mode, 17dB optical loss budget. 2Km range. Compact module, SC connector. US power adapter.	630.00
MCG1-M2-MLA	1000Mbps Ethernet LAN fiber optic media converter, 2 fibers, 1310nm multi-mode, 17dB optical loss budget. 2Km range. Compact module, LC connector. US power adapter.	630.00
MCG1-M1A-MSA	1000Mbps Ethernet LAN fiber optic media converter "A" side, 1 fiber, 1310/1550nm multi-mode, 17dB optical loss budget. 2Km range. Compact module, ST connector, US power adapter.	966.00
MCG1-M1B-MSA	1000Mbps Ethernet LAN fiber optic media converter "B" side, 1 fiber, 1310/1550nm multi-mode, 17dB optical loss budget. 2Km range. Compact module, ST connector, US power adapter.	966.00
MCG1-M1B-BS	1000Mbps Ethernet LAN fiber optic media converter "B" side, 1 fiber, 1310/1550nm multi-mode, 17dB optical loss budget. 2Km range. 3RU chassis card, ST connector, US power adapter.	966.00
MCG1-M1B-MCA	1000Mbps Ethernet LAN fiber optic media converter "B" side, 1 fiber, 1310/1550nm multi-mode, 17dB optical loss budget. 2Km range. Compact module, SC connector. US power adapter.	966.00
MCG1-M1B-MLA	1000Mbps Ethernet LAN fiber optic media converter "B" side, 1 fiber, 1310/1550nm multi-mode, 17dB optical loss budget. 2Km range. Compact module, LC connector. US power adapter.	966.00
Ethernet Media Converters - 1000Mbps, Single Mode		
MCG1-S2-MSA	1000Mbps Ethernet LAN fiber optic media converter, 2 fibers, 1310nm single mode, 20dB optical loss budget. 40Km range. Compact module, ST connector, US power adapter.	742.00
MCG1-S2-BS	1000Mbps Ethernet LAN fiber optic media converter, 2 fibers, 1310nm single mode, 20dB optical loss budget. 40Km range. 3RU chassis card, ST connector, US power adapter.	742.00
MCG1-S2-MCA	1000Mbps Ethernet LAN fiber optic media converter, 2 fibers, 1310nm single mode, 20dB optical loss budget. 40Km range. Compact module, SC connector. US power adapter.	742.00
MCG1-S2-MLA	1000Mbps Ethernet LAN fiber optic media converter, 2 fibers, 1310nm single mode, 20dB optical loss budget. 40Km range. Compact module, LC connector. US power adapter.	742.00
MCG1-S1A-MSA	1000Mbps Ethernet LAN fiber optic media converter "A" side, 1 fiber, 1310/1550nm single mode, 20dB optical loss budget. 30Km range. Compact module, ST connector, US power adapter.	987.00
MCG1-S1B-MSA	1000Mbps Ethernet LAN fiber optic media converter "B" side, 1 fiber, 1310/1550nm single mode, 20dB optical loss budget. 30Km range. Compact module, ST connector, US power adapter.	987.00
MCG1-S1B-BS	1000Mbps Ethernet LAN fiber optic media converter "B" side, 1 fiber, 1310/1550nm single mode, 20dB optical loss budget. 30Km range. 3RU chassis card, ST connector, US power adapter.	987.00
MCG1-S1B-MCA	1000Mbps Ethernet LAN fiber optic media converter "B" side, 1 fiber, 1310/1550nm single mode, 20dB optical loss budget. 30Km range. Compact module, SC connector. US power adapter.	987.00
MCG1-S1B-MLA	1000Mbps Ethernet LAN fiber optic media converter "B" side, 1 fiber, 1310/1550nm single mode, 20dB optical loss budget. 30Km range. Compact module, LC connector. US power adapter.	987.00
Ethernet Media Converters - 1000Mbps, 1 SFP combo port		
MCG1-P2-MSA	1000Mbps Ethernet LAN fiber optic media converter, 1 SFP port. Compact module, US power adapter.	525.00

Model Number	Product Description	MSRP
Ethernet PoE Media Converters – 10/100Mbps, Multi-Mode		
FTLS1-M2-WSA	100Base-FX PoE Ethernet LAN fiber optic media converter, 2 fibers, 1310nm multi-mode, 17dB optical loss budget. 4Km range. Desktop/wall-mount, ST connector, US power adapter.	630.00
FTLS1-M1A-WSA	10/100Mbps PoE Ethernet LAN fiber optic media converter "A" side, 1 fiber, 1310/1550nm multi-mode, 17dB optical loss budget. 4Km range. Desktop/wall-mount, ST connector, US power adapter.	777.00
Ethernet PoE Media Converters – 10/100Mbps, Single Mode		
FTLS1-S2-WSA	100Mbps PoE Ethernet LAN fiber optic media converter, 2 fibers, 1310nm single mode, 20dB optical loss budget. 40Km range. Desktop/wall-mount, ST connector, US power adapter.	714.00
FTLS1-S1A-WSA	100Mbps PoE Ethernet LAN fiber optic media converter "A" side, 1 fiber, 1310/1550nm single mode, 20dB optical loss budget. 30Km range. Desktop/wall-mount, ST connector, US power adapter.	798.00
Ethernet PoE Media Converters - 1000Mbps, Multi-Mode		
MCGS1-M2-WSA	1000Mbps PoE Ethernet LAN fiber optic media converter, 2 fibers, 1310nm multi-mode, 17dB optical loss budget. 2Km range. Desktop/wall-mount, ST connector, US power adapter.	945.00
MCGS1-M1A-WSA	1000Mbps PoE Ethernet LAN fiber optic media converter "A" side, 1 fiber, 1310/1550nm multi-mode, 17dB optical loss budget. 2Km range. Desktop/wall-mount, ST connector, US power adapter.	1,281.00
Ethernet PoE Media Converters - 1000Mbps, Single Mode		
MCGS1-S2-WSA	1000Mbps PoE Ethernet LAN fiber optic media converter, 2 fibers, 1310nm single mode, 20dB optical loss budget. 40Km range. Desktop/wall-mount, ST connector, US power adapter.	1,071.00
MCGS1-S1A-WSA	1000Mbps PoE Ethernet LAN fiber optic media converter "A" side, 1 fiber, 1310/1550nm single mode, 20dB optical loss budget. 30Km range. Desktop/wall-mount, ST connector, US power adapter.	1,407.00

Fiber Optic Products

Video Only

Model Number	Product Description	MSRP
Digital 8-bit Video Only, Multi-Mode		
FDVA1-M1T-MSA	1-ch point-to-point simplex video transmitter, 1 fiber, 1310nm multi-mode, 12dB optical loss budget. Compact module, ST connector, US power adapter.	202.00
FDVA1-M1R-MSA	1-ch point-to-point simplex video receiver, 1 fiber, 1310nm multi-mode, 12dB optical loss budget. Compact module, ST connector, US power adapter.	202.00
FDVA2-M2T-WSA	2-ch point-to-point simplex video transmitter, 2 fibers, 1310nm multi-mode, 12dB optical loss budget. Desktop/wall-mount, ST connector, US power adapter.	404.00
FDVA2-M2R-WSA	2-ch point-to-point simplex video receiver, 2 fibers, 1310nm multi-mode, 12dB optical loss budget. Desktop/wall-mount, ST connector, US power adapter.	404.00
FDVA4-M4T-WSA	4-ch point-to-point simplex video transmitter, 4 fibers, 1310nm multi-mode, 12dB optical loss budget. Desktop/wall-mount, ST connector, US power adapter.	807.00
FDVA4-M4R-WSA	4-ch point-to-point simplex video receiver, 4 fibers, 1310nm multi-mode, 12dB optical loss budget. Desktop/wall-mount, ST connector, US power adapter.	807.00
Digital 8-bit Video Only, Single Mode		
FDVA1-S1T-MSA	1-ch point-to-point simplex video transmitter, 1 fiber, 1310nm single mode, 15dB optical loss budget. Compact module, ST connector, US power adapter.	420.00
FDVA1-S1R-MSA	1-ch point-to-point simplex video receiver, 1 fiber, 1310nm single mode, 15dB optical loss budget. Compact module, ST connector, US power adapter.	420.00
FDVA2-S2T-WSA	2-ch point-to-point simplex video transmitter, 2 fibers, 1310nm single mode, 15dB optical loss budget. Desktop/wall-mount, ST connector, US power adapter.	840.00
FDVA2-S2R-WSA	2-ch point-to-point simplex video receiver, 2 fibers, 1310nm single mode, 15dB optical loss budget. Desktop/wall-mount, ST connector, US power adapter.	840.00
FDVA4-S4T-WSA	4-ch point-to-point simplex video transmitter, 4 fibers, 1310nm single mode, 15dB optical loss budget. Desktop/wall-mount, ST connector, US power adapter.	1,680.00
FDVA4-S4R-WSA	4-ch point-to-point simplex video receiver, 4 fibers, 1310nm single mode, 15dB optical loss budget. Desktop/wall-mount, ST connector, US power adapter.	1,680.00
Digital 10-bit Video Only, Multi-Mode		
FDHA1-M1T-MSA	1-ch point-to-point simplex 10-bit video transmitter, 1 fiber, 1310nm multi-mode, 12dB optical loss budget. Compact module, ST connector, US power adapter.	672.00
FDHA1-M1R-MSA	1-ch point-to-point simplex 10-bit video receiver, 1 fiber, 1310nm multi-mode, 12dB optical loss budget. Compact module, ST connector, US power adapter.	672.00
FDHA2-M2T-WSA	2-ch point-to-point simplex 10-bit video transmitter, 2 fibers, 1310nm multi-mode, 12dB optical loss budget. Desktop/wall-mount, ST connector, US power adapter.	1,344.00
FDHA2-M2R-WSA	2-ch point-to-point simplex 10-bit video receiver, 2 fibers, 1310nm multi-mode, 12dB optical loss budget. Desktop/wall-mount, ST connector, US power adapter.	1,344.00
FDHA4-M4T-WSA	4-ch point-to-point simplex 10-bit video transmitter, 4 fibers, 1310nm multi-mode, 12dB optical loss budget. Desktop/wall-mount, ST connector, US power adapter.	2,688.00
FDHA4-M4R-WSA	4-ch point-to-point simplex 10-bit video receiver, 4 fibers, 1310nm multi-mode, 12dB optical loss budget. Desktop/wall-mount, ST connector, US power adapter.	2,688.00

Model Number	Product Description	MSRP
Digital 10-bit Video Only, Single Mode		
FDHA1-S1T-MSA	1-ch point-to-point simplex 10-bit video transmitter, 1 fiber, 1310nm single mode, 15dB optical loss budget. Compact module, ST connector, US power adapter.	773.00
FDHA1-S1R-MSA	1-ch point-to-point simplex 10-bit video receiver, 1 fiber, 1310nm single mode, 15dB optical loss budget. Compact module, ST connector, US power adapter.	773.00
FDHA2-S2T-WSA	2-ch point-to-point simplex 10-bit video transmitter, 2 fibers, 1310nm single mode, 15dB optical loss budget. Desktop/wall-mount, ST connector, US power adapter.	1,546.00
FDHA2-S2R-WSA	2-ch point-to-point simplex 10-bit video receiver, 2 fibers, 1310nm single mode, 15dB optical loss budget. Desktop/wall-mount, ST connector, US power adapter.	1,546.00
FDHA4-S4T-WSA	4-ch point-to-point simplex 10-bit video transmitter, 4 fibers, 1310nm single mode, 15dB optical loss budget. Desktop/wall-mount, ST connector, US power adapter.	3,092.00
FDHA4-S4R-WSA	4-ch point-to-point simplex 10-bit video receiver, 4 fibers, 1310nm single mode, 15dB optical loss budget. Desktop/wall-mount, ST connector, US power adapter.	3,092.00

Video - Multiplexed

Model Number	Product Description	MSRP
Digital 8-bit Multiplexed Video Only, Multi-Mode		
FDVA4-M1T-WSA	4-ch point-to-point simplex video transmitter, 1 fiber, 1310nm multi-mode, 12dB optical loss budget. Desktop/wall-mount, ST connector, US power adapter.	1,155.00
FDVA4-M1R-WSA	4-ch point-to-point simplex video receiver, 1 fiber, 1310nm multi-mode, 12dB optical loss budget. Desktop/wall-mount, ST connector, US power adapter.	1,155.00
FPVG8-MT	8-ch point-to-point simplex video transmitter, 1 fiber, 1310nm multi-mode, 12dB optical loss budget. Desktop/wall-mount, ST connector, US power adapter.	2,100.00
FPVG8-MR	8-ch point-to-point simplex video receiver, 1 fiber, 1310nm multi-mode, 12dB optical loss budget. Desktop/wall-mount, ST connector, US power adapter.	2,100.00
FPVG16-MT-R	16-ch point-to-point simplex video transmitter, 1 fiber, multi-mode, 12dB optical loss budget. 1RU rack mounted, ST connector, US power adapter.	5,340.00
FPVG16-MR-R	16-ch point-to-point simplex video receiver, 1 fiber, multi-mode, 12dB optical loss budget. 1RU rack mounted, ST connector, US power adapter.	5,340.00
Digital 8-bit Multiplexed Video Only, Single Mode		
FDVA4-S1T-WSA	4-ch point-to-point simplex video transmitter, 1 fiber, 1310nm single mode, 15dB optical loss budget. Desktop/wall-mount, ST connector, US power adapter.	1,649.00
FDVA4-S1R-WSA	4-ch point-to-point simplex video receiver, 1 fiber, 1310nm single mode, 15dB optical loss budget. Desktop/wall-mount, ST connector, US power adapter.	1,649.00
FPVG8-ST	8-ch point-to-point simplex video transmitter, 1 fiber, 1310nm single mode, 15dB optical loss budget. Desktop/wall-mount, ST connector, US power adapter.	2,625.00
FPVG8-SR	8-ch point-to-point simplex video receiver, 1 fiber, 1310nm single mode, 15dB optical loss budget. Desktop/wall-mount, ST connector, US power adapter.	2,625.00
FPVG16-ST-R	16-ch point-to-point simplex video transmitter, 1 fiber, 1310nm single mode, 15dB optical loss budget. 1RU rack mounted, ST connector, US power adapter.	6,600.00
FPVG16-SR-R	16-ch point-to-point simplex video receiver, 1 fiber, 1310nm single mode, 15dB optical loss budget. 1RU rack mounted, ST connector, US power adapter.	6,600.00

Model Number	Product Description	MSRP
FPVA24-ST-R	24-ch point-to-point simplex video transmitter, 1 fiber, 1310nm single mode, 20dB optical loss budget. 2RU rack mounted, ST connector, US power adapter.	15,510.00
FPVA24-SR-R	24-ch point-to-point simplex video receiver, 1 fiber, 1310nm single mode, 20dB optical loss budget. 2RU rack mounted, ST connector, US power adapter.	15,510.00
FPVA32-ST-R	32-ch point-to-point simplex video transmitter, 1 fiber, 1310nm single mode, 20dB optical loss budget. 2RU rack mounted, ST connector, US power adapter.	20,865.00
FPVA32-SR-R	32-ch point-to-point simplex video receiver, 1 fiber, 1310nm single mode, 20dB optical loss budget. 2RU rack mounted, ST connector, US power adapter.	20,865.00
Digital 10-bit Multiplexed Video Only, Multi-Mode		
FDHA4-M1T-WSA	4-ch point-to-point simplex 10-bit video transmitter, 1 fiber, 1310nm multi-mode, 12dB optical loss budget. Desktop/wall-mount, ST connector, US power adapter.	1,659.00
FDHA4-M1R-WSA	4-ch point-to-point simplex 10-bit video receiver, 1 fiber, 1310nm multi-mode, 12dB optical loss budget. Desktop/wall-mount, ST connector, US power adapter.	1,659.00
Digital 10-bit Multiplexed Video Only, Single Mode		
FDHA4-S1T-WSA	4-ch point-to-point simplex 10-bit video transmitter, 1 fiber, 1310nm single mode, 15dB optical loss budget. Desktop/wall-mount, ST connector, US power adapter.	2,442.00
FDHA4-S1R-WSA	4-ch point-to-point simplex 10-bit video receiver, 1 fiber, 1310nm single mode, 15dB optical loss budget. Desktop/wall-mount, ST connector, US power adapter.	2,442.00

Video with Bi-Directional Data

Model Number	Product Description	MSRP
Digital 8-bit Video with Duplex Data, Multi-Mode		
FDVA1-DB1-M1T-MSA	1-ch point-to-point simplex video transmitter, 1-ch duplex data, 1 fiber, 1310/1550nm multi-mode, 12dB optical loss budget. Compact module, ST connector, US power adapter.	473.00
FDVA1-DB1-M1R-MSA	1-ch point-to-point simplex video receiver, 1-ch duplex data, 1 fiber, 1310/1550nm multi-mode, 12dB optical loss budget. Compact module, ST connector, US power adapter.	473.00
FDVA2-DB2-M2T-WSA	Dual point-to-point simplex video transmitter, duplex data, 2 fibers, 1310/1550nm multi-mode, 12dB optical loss budget. Desktop/wall-mount, ST connector, US power adapter.	945.00
FDVA2-DB2-M2R-WSA	Dual point-to-point simplex video receiver, duplex data, 2 fibers, 1310/1550nm multi-mode, 12dB optical loss budget. Desktop/wall-mount, ST connector, US power adapter.	945.00
FDVA4-DB1-M1T-WSA	4-ch point-to-point simplex video transmitter, 1-ch duplex data, 1 fiber, 1310/1550nm multi-mode, 12dB optical loss budget. Desktop/wall-mount, ST connector, US power adapter.	1,523.00
FDVA4-DB1-M1R-WSA	4-ch point-to-point simplex video receiver, 1-ch duplex data, 1 fiber, 1310/1550nm multi-mode, 12dB optical loss budget. Desktop/wall-mount, ST connector, US power adapter.	1,523.00
FPVG8-DB1-MT	8-ch point-to-point simplex video transmitter, 1-ch bi-directional RS232/422/485 data1 fiber, multi-mode, 12dB optical loss budget. Desktop/wall-mount, ST connector, US power adapter.	2,520.00
FPVG8-DB1-MR	8-ch point-to-point simplex video receiver, 1-ch bi-directional RS232/422/485 data1 fiber, multi-mode, 12dB optical loss budget. Desktop/wall-mount, ST connector, US power adapter.	2,520.00
FPVG16-DB1-MT-R	16-ch point-to-point simplex video transmitter, 1-ch bi-directional RS232/422/485 data1 fiber, multi-mode, 12dB optical loss budget. 1RU rack mounted, ST connector, US power adapter.	5,760.00
FPVG16-DB1-MR-R	16-ch point-to-point simplex video receiver, 1-ch bi-directional RS232/422/485 data1 fiber, multi-mode, 12dB optical loss budget. 1RU rack mounted, ST connector, US power adapter.	5,760.00

Model Number	Product Description	MSRP
Digital 8-bit Video with Duplex Data, Single Mode		
FDVA1-DB1-S1T-MSA	1-ch point-to-point simplex video transmitter, 1-ch duplex data, 1 fiber, 1310/1550nm single mode, 15dB optical loss budget. Compact module, ST connector, US power adapter.	840.00
FDVA1-DB1-S1R-MSA	1-ch point-to-point simplex video receiver, 1-ch duplex data, 1 fiber, 1310/1550nm single mode, 15dB optical loss budget. Compact module, ST connector, US power adapter.	840.00
FDVA2-DB2-S2T-WSA	Dual point-to-point simplex video transmitter, duplex data, 2 fibers, 1310/1550nm single mode, 15dB optical loss budget. Desktop/wall-mount, ST connector, US power adapter.	1,680.00
FDVA2-DB2-S2R-WSA	Dual point-to-point simplex video receiver, duplex data, 2 fibers, 1310/1550nm single mode, 15dB optical loss budget. Desktop/wall-mount, ST connector, US power adapter.	1,680.00
FDVA4-DB1-S1T-WSA	4-ch point-to-point simplex video transmitter, 1-ch duplex data, 1 fiber, 1310/1550nm single mode, 15dB optical loss budget. Desktop/wall-mount, ST connector, US power adapter.	1,943.00
FDVA4-DB1-S1R-WSA	4-ch point-to-point simplex video receiver, 1-ch duplex data, 1 fiber, 1310/1550nm single mode, 15dB optical loss budget. Desktop/wall-mount, ST connector, US power adapter.	1,943.00
FPVG8-DB1-ST	8-ch point-to-point simplex video transmitter, 1-ch bi-directional RS232/422/485 data1 fiber, single mode, 15dB optical loss budget. Desktop/wall-mount, ST connector, US power adapter.	3,045.00
FPVG8-DB1-SR	8-ch point-to-point simplex video receiver, 1-ch bi-directional RS232/422/485 data1 fiber, single mode, 15dB optical loss budget. Desktop/wall-mount, ST connector, US power adapter.	3,045.00
FPVG16-DB1-ST-R	16-ch point-to-point simplex video transmitter, 1-ch bi-directional RS232/422/485 data1 fiber, single mode, 15dB optical loss budget. 1RU rack mounted, ST connector, US power adapter.	7,125.00
FPVG16-DB1-SR-R	16-ch point-to-point simplex video receiver, 1-ch bi-directional RS232/422/485 data1 fiber, single mode, 15dB optical loss budget. 1RU rack mounted, ST connector, US power adapter.	7,125.00
FPVB24-DB1-ST-R	24-ch point-to-point simplex video transmitter, 1-ch bi-directional RS232/422/485 data1 fiber, single mode, 18dB optical loss budget. 2RU rack mounted, ST connector, US power adapter.	16,665.00
FPVB24-DB1-SR-R	24-ch point-to-point simplex video receiver, 1-ch bi-directional RS232/422/485 data1 fiber, single mode, 18dB optical loss budget. 2RU rack mounted, ST connector, US power adapter.	16,665.00
FPVB32-DB1-ST-R	32-ch point-to-point simplex video transmitter, 1-ch bi-directional RS232/422/485 data1 fiber, single mode, 18dB optical loss budget. 2RU rack mounted, ST connector, US power adapter.	21,915.00
FPVB32-DB1-SR-R	32-ch point-to-point simplex video receiver, 1-ch bi-directional RS232/422/485 data1 fiber, single mode, 18dB optical loss budget. 2RU rack mounted, ST connector, US power adapter.	21,915.00
Digital 10-bit Video with Duplex Data, Multi-Mode		
FDHA1-DB1-M1T-MSA	1-ch point-to-point simplex 10-bit video transmitter, 1-ch duplex data, 1 fiber, 1310/1550nm multi-mode, 12dB optical loss budget. Compact module, ST connector, US power adapter.	683.00
FDHA1-DB1-M1R-MSA	1-ch point-to-point simplex 10-bit video receiver, 1-ch duplex data, 1 fiber, 1310/1550nm multi-mode, 12dB optical loss budget. Compact module, ST connector, US power adapter.	683.00
FDHA2-DB2-M2T-WSA	2-ch point-to-point simplex 10-bit video transmitter, 2-ch duplex data, 2 fibers ST connector, 1310/1550nm multi-mode, 12dB optical loss budget. Desktop/wall-mount, ST connector, US power adapter.	1,365.00
FDHA2-DB2-M2R-WSA	2-ch point-to-point simplex 10-bit video receiver, 2-ch duplex data, 2 fibers ST connector, 1310/1550nm multi-mode, 12dB optical loss budget. Desktop/wall-mount, ST connector, US power adapter.	1,365.00
FDHA4-DB1-M1T-WSA	4-ch point-to-point simplex 10-bit video transmitter, 1-ch duplex data, 1 fiber, 1310/1550nm multi-mode, 12dB optical loss budget. Desktop/wall-mount, ST connector, US power adapter.	1,890.00
FDHA4-DB1-M1R-WSA	4-ch point-to-point simplex 10-bit video receiver, 1-ch duplex data, 1 fiber, 1310/1550nm multi-mode, 12dB optical loss budget. Desktop/wall-mount, ST connector, US power adapter.	1,890.00

Model Number	Product Description	MSRP
Digital 10-bit Video with Duplex Data, Single Mode		
FDHA1-DB1-S1T-MSA	1-ch point-to-point simplex 10-bit video transmitter, 1-ch duplex data, 1 fiber, 1310/1550nm single mode, 15dB optical loss budget. Compact module, ST connector, US power adapter.	1,050.00
FDHA1-DB1-S1R-MSA	1-ch point-to-point simplex 10-bit video receiver, 1-ch duplex data, 1 fiber, 1310/1550nm single mode, 15dB optical loss budget. Compact module, ST connector, US power adapter.	1,050.00
FDHA2-DB2-S2T-WSA	2-ch point-to-point simplex 10-bit video transmitter, 2-ch duplex data, 2 fibers ST connector, 1310/1550nm single mode, 15dB optical loss budget. Desktop/wall-mount, ST connector, US power adapter.	2,100.00
FDHA2-DB2-S2R-WSA	2-ch point-to-point simplex 10-bit video receiver, 2-ch duplex data, 2 fibers ST connector, 1310/1550nm single mode, 15dB optical loss budget. Desktop/wall-mount, ST connector, US power adapter.	2,100.00
FDHA4-DB1-S1T-WSA	4-ch point-to-point simplex 10-bit video transmitter, 1-ch duplex data, 1 fiber, 1310/1550nm single mode, 15dB optical loss budget. Desktop/wall-mount, ST connector, US power adapter.	2,310.00
FDHA4-DB1-S1R-WSA	4-ch point-to-point simplex 10-bit video receiver, 1-ch duplex data, 1 fiber, 1310/1550nm single mode, 15dB optical loss budget. Desktop/wall-mount, ST connector, US power adapter.	2,310.00

Video with Bi-Directional Data and Contact Closures

Model Number	Product Description	MSRP
Digital 8-bit Video with Duplex Data, Contact Closures, Multi-Mode		
FDVA1-DB1-IB1-M1T-MSA	1-ch point-to-point simplex video transmitter, 1-ch duplex data, 1-ch duplex contact closure, 1 fiber, 1310/1550nm multi-mode, 12dB optical loss budget. Compact module, ST connector, US power adapter.	609.00
FDVA1-DB1-IB1-M1R-MSA	1-ch point-to-point simplex video receiver, 1-ch duplex data, 1-ch duplex contact closure, 1 fiber, 1310/1550nm multi-mode, 12dB optical loss budget. Compact module, ST connector, US power adapter.	609.00
Digital 8-bit Video with Duplex Data, Contact Closures, Single Mode		
FDVA1-DB1-IB1-S1T-MSA	1-ch point-to-point simplex video transmitter, 1-ch duplex data, 1-ch duplex contact closure, 1 fiber, 1310/1550nm single mode, 15dB optical loss budget. Compact module, ST connector, US power adapter.	998.00
FDVA1-DB1-IB1-S1R-MSA	1-ch point-to-point simplex video receiver, 1-ch duplex data, 1-ch duplex contact closure, 1 fiber, 1310/1550nm single mode, 15dB optical loss budget. Compact module, ST connector, US power adapter.	998.00
Digital 10-bit Video with Duplex Data, Contact Closures, Multi-Mode		
FDHA1-DB1-IB1-M1T-MSA	1-ch point-to-point simplex 10-bit video transmitter, 1-ch duplex data, 1-ch duplex contact closure, 1 fiber, 1310/1550nm multi-mode, 12dB optical loss budget. Compact module, ST connector, US power adapter.	840.00
FDHA1-DB1-IB1-M1R-MSA	1-ch point-to-point simplex 10-bit video receiver, 1-ch duplex data, 1-ch duplex contact closure, 1 fiber, 1310/1550nm multi-mode, 12dB optical loss budget. Compact module, ST connector, US power adapter.	840.00
Digital 10-bit Video with Duplex Data, Contact Closures, Single Mode		
FDHA1-DB1-IB1-S1T-MSA	1-ch point-to-point simplex 10-bit video transmitter, 1-ch duplex data, 1-ch duplex contact closure, 1 fiber, 1310/1550nm single mode, 15dB optical loss budget. Compact module, ST connector, US power adapter.	1,155.00
FDHA1-DB1-IB1-S1R-MSA	1-ch point-to-point simplex 10-bit video receiver, 1-ch duplex data, 1-ch duplex contact closure, 1 fiber, 1310/1550nm single mode, 15dB optical loss budget. Compact module, ST connector, US power adapter.	1,155.00

Video with Contact Closures

Model Number	Product Description	MSRP
Digital 8-bit Video with Simplex Contact Closures, Multi-Mode		
FDVA1-IA1-M1T-MSA	1-ch point-to-point simplex video transmitter, 1-ch simplex contact closure, 1 fiber, 1310/1550nm multi-mode, 12dB optical loss budget. Compact module, ST connector, US power adapter.	315.00
FDVA1-IA1-M1R-MSA	1-ch point-to-point simplex video receiver, 1-ch simplex contact closure, 1 fiber, 1310/1550nm multi-mode, 12dB optical loss budget. Compact module, ST connector, US power adapter.	315.00
FDVA2-IA2-M2T-WSA	Dual point-to-point simplex video transmitter, simplex contact closure, 2 fibers, 1310nm multi-mode, 12dB optical loss budget. Desktop/wall-mount, ST connector, US power adapter.	630.00
FDVA2-IA2-M2R-WSA	Dual point-to-point simplex video receiver, simplex contact closure, 2 fibers, 1310nm multi-mode, 12dB optical loss budget. Desktop/wall-mount, ST connector, US power adapter.	630.00

Model Number	Product Description	MSRP
Digital 8-bit Video with Simplex Contact Closures, Single Mode		
FDVA1-IA1-S1T-MSA	1-ch point-to-point simplex video transmitter, 1-ch simplex contact closure, 1 fiber, 1310/1550nm single mode, 15dB optical loss budget. Compact module, ST connector, US power adapter.	924.00
FDVA1-IA1-S1R-MSA	1-ch point-to-point simplex video receiver, 1-ch simplex contact closure, 1 fiber, 1310/1550nm single mode, 15dB optical loss budget. Compact module, ST connector, US power adapter.	924.00
FDVA2-IA2-S2T-WSA	Dual point-to-point simplex video transmitter, simplex contact closure, 2 fibers, 1310nm single mode, 15dB optical loss budget. Desktop/wall-mount, ST connector, US power adapter.	1,848.00
FDVA2-IA2-S2R-WSA	Dual point-to-point simplex video receiver, simplex contact closure, 2 fibers, 1310nm single mode, 15dB optical loss budget. Desktop/wall-mount, ST connector, US power adapter.	1,848.00

Video with Return Simplex Data

Model Number	Product Description	MSRP
Digital 8-bit Video with Return Simplex Data, Multi-Mode		
FDVA1-DC1-M1T-MSA	1-ch point-to-point simplex video transmitter, 1-ch RS-422 data receiver, 1 fiber, 1310nm multi-mode, 12dB optical loss budget. Compact module, ST connector, US power adapter.	410.00
FDVA1-DC1-M1R-MSA	1-ch point-to-point simplex video receiver, 1-ch RS-422 data transmitter, 1 fiber, 1310nm multi-mode, 12dB optical loss budget. Compact module, ST connector, US power adapter.	410.00
Digital 8-bit Video with Return Simplex Data, Single Mode		
FDVA1-DC1-S1T-MSA	1-ch point-to-point simplex video transmitter, 1-ch RS-422 data receiver, 1 fiber, 1310nm single mode, 15dB optical loss budget. Compact module, ST connector, US power adapter.	735.00
FDVA1-DC1-S1R-MSA	1-ch point-to-point simplex video receiver, 1-ch RS-422 data transmitter, 1 fiber, 1310nm single mode, 15dB optical loss budget. Compact module, ST connector, US power adapter.	735.00

Video with Up-The-Coax Control

Model Number	Product Description	MSRP
Digital Video with Up-the-Coax PTZ Control, Multi-Mode		
FCHA1-M1T-WSA	1-ch point-to-point simplex video with up-the-coax telemetry transmitter, 2-ch duplex contact closures, 1 fiber, 1310/1550nm multi-mode, 12dB optical loss budget, ~4Km range. Desktop/wall-mount, ST connector, US power adapter.	622.00
FCHA1-M1R-WSA	1-ch point-to-point simplex video with up-the-coax telemetry receiver, 2-ch duplex contact closures, 1 fiber, 1310/1550nm multi-mode, 12dB optical loss budget, ~4Km range. Desktop/wall-mount, ST connector, US power adapter.	622.00
FCHA2-M2R-WSA	Dual point-to-point simplex video with up-the-coax telemetry receivers, 2 fibers, 1310/1550nm multi-mode, 12dB optical loss budget, ~4Km range. Desktop/wall-mount, ST connector, US power adapter.	1,244.00
Digital Video with Up-the-Coax PTZ Control, Single Mode		
FCHA1-S1T-WSA	1-ch point-to-point simplex video with up-the-coax telemetry transmitter, 2-ch duplex contact closures, 1 fiber, 1310/1550nm single mode, 15dB optical loss budget, ~30Km range. Desktop/wall-mount, ST connector, US power adapter.	945.00
FCHA1-S1R-WSA	1-ch point-to-point simplex video with up-the-coax telemetry receiver, 2-ch duplex contact closures, 1 fiber, 1310/1550nm single mode, 15dB optical loss budget, ~30Km range. Desktop/wall-mount, ST connector, US power adapter.	945.00
FCHA2-S2R-WSA	Dual point-to-point simplex video with up-the-coax telemetry receivers, 2 fibers, 1310/1550nm single mode, 15dB optical loss budget, ~30Km range. Desktop/wall-mount, ST connector, US power adapter.	1,890.00

Data

Model Number	Product Description	MSRP
Multiprotocol Data Transceivers, Multi-Mode		
FDDB1-M1T-MSA	1-ch point-to-point duplex RS232/422/485 data transmitter, 1 fiber, 1310/1550nm multi-mode, 12dB optical loss budget. Compact module, ST connector, US power adapter.	410.00
FDDB1-M1R-MSA	1-ch point-to-point duplex RS232/422/485 data receiver, 1 fiber, 1310/1550nm multi-mode, 12dB optical loss budget. Compact module, ST connector, US power adapter.	410.00
Multiprotocol Data Transceivers, Single Mode		
FDDB1-S1T-MSA	1-ch point-to-point duplex RS232/422/485 data transmitter, 1 fiber, 1310/1550nm single mode, 15dB optical loss budget. Compact module, ST connector, US power adapter.	683.00
FDDB1-S1R-MSA	1-ch point-to-point duplex RS232/422/485 data receiver, 1 fiber, 1310/1550nm single mode, 15dB optical loss budget. Compact module, ST connector, US power adapter.	683.00
Data Bus - Multi-Mode		
FTD-M2-WSA	1-ch cascaded bus duplex RS232/422/485 data end node, 2 fibers, multi-mode transceiver. Desktop/wall-mount, ST connector, US power adapter.	420.00
FTDB-M2-WSA	1-ch cascaded bus duplex RS232/422/485 data, 2 fibers, multi-mode transceiver. Desktop/wall-mount, ST connector, US power adapter.	840.00
FTD-M1A-WSA	1-ch cascaded bus duplex RS232/422/485 data end node, 1 fiber, multi-mode transceiver, "A" end. Desktop/wall-mount, ST connector, US power adapter.	525.00
FTD-M1B-WSA	1-ch cascaded bus duplex RS232/422/485 data end node, 1 fiber, multi-mode transceiver, "B" end. Desktop/wall-mount, ST connector, US power adapter.	525.00
FTDB-M1A-WSA	1-ch cascaded bus duplex RS232/422/485 data, 1 fiber, multi-mode transceiver, "A" end. Desktop/wall-mount, ST connector, US power adapter.	1,344.00
FTDB-M1B-WSA	1-ch cascaded bus duplex RS232/422/485 data, 1 fiber, multi-mode transceiver, "B" end. Desktop/wall-mount, ST connector, US power adapter.	1,344.00
Data Bus - Single Mode		
FTD-S2-WSA	1-ch cascaded bus duplex RS232/422/485 data end node, 2 fibers, single mode transceiver. Desktop/wall-mount, ST connector, US power adapter.	683.00
FTDB-S2-WSA	1-ch cascaded bus duplex RS232/422/485 data, 2 fibers, single mode transceiver. Desktop/wall-mount, ST connector, US power adapter.	1,260.00
FTD-S1A-WSA	1-ch cascaded bus duplex RS232/422/485 data end node, 1 fiber, single mode transceiver, "A" end. Desktop/wall-mount, ST connector, US power adapter.	1,050.00
FTD-S1B-WSA	1-ch cascaded bus duplex RS232/422/485 data end node, 1 fiber, single mode transceiver, "B" end. Desktop/wall-mount, ST connector, US power adapter.	1,050.00
FTDB-S1A-WSA	1-ch cascaded bus duplex RS232/422/485 data, 1 fiber, single mode transceiver, "A" end. Desktop/wall-mount, ST connector, US power adapter.	1,964.00
FTDB-S1B-WSA	1-ch cascaded bus duplex RS232/422/485 data, 1 fiber, single mode transceiver, "B" end. Desktop/wall-mount, ST connector, US power adapter.	1,964.00

Data – Self Healing Ring

Model Number	Product Description	MSRP
Data Self-Healing Ring - Multi-Mode		
FTDR-M2-WSA	RS232/422/485 multi-drop self-healing ring, 2 fibers, multi-mode. Desktop/wall-mount, ST connector, US power adapter.	1,470.00
Data Self-Healing Ring - Single Mode		
FTDR-S2-WSA	RS232/422/485 multi-drop self-healing ring, 2 fibers, single mode. Desktop/wall-mount, ST connector, US power adapter.	2,100.00

Audio

Model Number	Product Description	MSRP
Simplex Audio, Multi-Mode		
FPA1-MT	1-ch point-to-point simplex audio transmitter, 1 fiber, 12dB optical loss budget, multi-mode. Desktop/wall-mount, ST connector, US power adapter.	420.00
FPA1-MR	1-ch point-to-point simplex audio receiver, 1 fiber, 12dB optical loss budget, multi-mode. Desktop/wall-mount, ST connector, US power adapter.	420.00
Simplex Audio, Single Mode		
FPA1-ST	1-ch point-to-point simplex audio transmitter, 1 fiber, 18dB optical loss budget, single mode. Desktop/wall-mount, ST connector, US power adapter.	630.00
FPA1-SR	1-ch point-to-point simplex audio receiver, 1 fiber, 18dB optical loss budget, single mode. Desktop/wall-mount, ST connector, US power adapter.	630.00
Duplex Audio, Multi-Mode		
FPA1-MT	1-ch point-to-point duplex audio transmitter, 1 fiber, 12dB optical loss budget, multi-mode. Desktop/wall-mount, ST connector, US power adapter.	609.00
FPA1-MR	1-ch point-to-point duplex audio receiver, 1 fiber, 12dB optical loss budget, multi-mode. Desktop/wall-mount, ST connector, US power adapter.	609.00
Duplex Audio, Single Mode		
FPA1-ST	1-ch point-to-point duplex audio transmitter, 1 fiber, 18dB optical loss budget, single mode. Desktop/wall-mount, ST connector, US power adapter.	893.00
FPA1-SR	1-ch point-to-point duplex audio receiver, 1 fiber, 18dB optical loss budget, single mode. Desktop/wall-mount, ST connector, US power adapter.	893.00

Contact Closures

Model Number	Product Description	MSRP
Simplex Contact Closure Point-to-Point, Multi-Mode		
FPIA1-MT	1-ch point-to-point simplex contact closure, 1 fiber, 12dB optical loss budget, multi-mode transmitter. Desktop/wall-mount, ST connector, US power adapter.	357.00
FPIA1-MR	1-ch point-to-point simplex contact closure, 1 fiber, 12dB optical loss budget, multi-mode receiver. Desktop/wall-mount, ST connector, US power adapter.	357.00
FPIA4-MT	4-ch point-to-point simplex contact closure, 1 fiber, 12dB optical loss budget, multi-mode transmitter. Desktop/wall-mount, ST connector, US power adapter.	578.00
FPIA4-MR	4-ch point-to-point simplex contact closure, 1 fiber, 12dB optical loss budget, multi-mode receiver. Desktop/wall-mount, ST connector, US power adapter.	578.00
FPIA8-MT	8-ch point-to-point simplex contact closure, 1 fiber, 12dB optical loss budget, multi-mode transmitter. Desktop/wall-mount, ST connector, US power adapter.	735.00
FPIA8-MR	8-ch point-to-point simplex contact closure, 1 fiber, 12dB optical loss budget, multi-mode receiver. Desktop/wall-mount, ST connector, US power adapter.	735.00
Simplex Contact Closure Point-to-Point, Single Mode		
FPIA1-ST	1-ch point-to-point simplex contact closure, 1 fiber, 18dB optical loss budget, single mode transmitter. Desktop/wall-mount, ST connector, US power adapter.	683.00
FPIA1-SR	1-ch point-to-point simplex contact closure, 1 fiber, 18dB optical loss budget, single mode receiver. Desktop/wall-mount, ST connector, US power adapter.	683.00
FPIA4-ST	4-ch point-to-point simplex contact closure, 1 fiber, 18dB optical loss budget, single mode transmitter. Desktop/wall-mount, ST connector, US power adapter.	1,103.00
FPIA4-SR	4-ch point-to-point simplex contact closure, 1 fiber, 18dB optical loss budget, single mode receiver. Desktop/wall-mount, ST connector, US power adapter.	1,103.00

Model Number	Product Description	MSRP
FPIA8-ST	8-ch point-to-point simplex contact closure, 1 fiber, 18dB optical loss budget, single mode transmitter. Desktop/wall-mount, ST connector, US power adapter.	1,050.00
FPIA8-SR	8-ch point-to-point simplex contact closure, 1 fiber, 18dB optical loss budget, single mode receiver. Desktop/wall-mount, ST connector, US power adapter.	1,050.00
Duplex Contact Closure Point-to-Point, Multi-Mode		
FPID1-MT	1-ch point-to-point duplex contact closure, 1 fiber, 12dB optical loss budget, multi-mode transmitter. Desktop/wall-mount, ST connector, US power adapter.	389.00
FPID1-MR	1-ch point-to-point duplex contact closure, 1 fiber, 12dB optical loss budget, multi-mode receiver. Desktop/wall-mount, ST connector, US power adapter.	389.00
FPID4-MT	4-ch point-to-point duplex contact closure, 1 fiber, 12dB optical loss budget, multi-mode transmitter. Desktop/wall-mount, ST connector, US power adapter.	945.00
FPID4-MR	4-ch point-to-point duplex contact closure, 1 fiber, 12dB optical loss budget, multi-mode receiver. Desktop/wall-mount, ST connector, US power adapter.	945.00
FPID8-MT	8-ch point-to-point duplex contact closure, 1 fiber, 12dB optical loss budget, multi-mode transmitter. Desktop/wall-mount, ST connector, US power adapter.	1,344.00
FPID8-MR	8-ch point-to-point duplex contact closure, 1 fiber, 12dB optical loss budget, multi-mode receiver. Desktop/wall-mount, ST connector, US power adapter.	1,344.00
Duplex Contact Closure Point-to-Point, Single Mode		
FPID1-ST	1-ch point-to-point duplex contact closure, 1 fiber, 18dB optical loss budget, single mode transmitter. Desktop/wall-mount, ST connector, US power adapter.	735.00
FPID1-SR	1-ch point-to-point duplex contact closure, 1 fiber, 18dB optical loss budget, single mode receiver. Desktop/wall-mount, ST connector, US power adapter.	735.00
FPID4-ST	4-ch point-to-point duplex contact closure, 1 fiber, 18dB optical loss budget, single mode transmitter. Desktop/wall-mount, ST connector, US power adapter.	1,155.00
FPID4-SR	4-ch point-to-point duplex contact closure, 1 fiber, 18dB optical loss budget, single mode receiver. Desktop/wall-mount, ST connector, US power adapter.	1,155.00
FPID8-ST	8-ch point-to-point duplex contact closure, 1 fiber, 18dB optical loss budget, single mode transmitter. Desktop/wall-mount, ST connector, US power adapter.	1,680.00
FPID8-SR	8-ch point-to-point duplex contact closure, 1 fiber, 18dB optical loss budget, single mode receiver. Desktop/wall-mount, ST connector, US power adapter.	1,680.00

Telephone

Model Number	Product Description	MSRP
Telephone, Multi-Mode		
FPTD1-MT	1-ch point-to-point telephone transmitter, 1 fiber, 12dB optical loss budget, multi-mode. Desktop/wall-mount, ST connector, US power adapter.	1,155.00
FPTD1-MR	1-ch point-to-point telephone receiver, 1 fiber, 12dB optical loss budget, multi-mode. Desktop/wall-mount, ST connector, US power adapter.	1,155.00
Telephone, Single Mode		
FPTD1-ST	1-ch point-to-point telephone transmitter, 1 fiber, 18dB optical loss budget, single mode. Desktop/wall-mount, ST connector, US power adapter.	1,680.00
FPTD1-SR	1-ch point-to-point telephone receiver, 1 fiber, 18dB optical loss budget, single mode. Desktop/wall-mount, ST connector, US power adapter.	1,680.00
Duplex E1 Channel, Multi-Mode		
FPED1-MT	1-ch point-to-point duplex E1 transmitter, 1 fiber, 12dB optical loss budget, multi-mode. Desktop/wall-mount, ST connector, US power adapter.	840.00
FPED1-MR	1-ch point-to-point duplex E1 receiver, 1 fiber, 12dB optical loss budget, multi-mode. Desktop/wall-mount, ST connector, US power adapter.	840.00
Duplex E1 Channel, Single Mode		
FPED1-ST	1-ch point-to-point duplex E1 transmitter, 1 fiber, 18dB optical loss budget, single mode. Desktop/wall-mount, ST connector, US power adapter.	1,260.00
FPED1-SR	1-ch point-to-point duplex E1 receiver, 1 fiber, 18dB optical loss budget, single mode. Desktop/wall-mount, ST connector, US power adapter.	1,260.00

Chassis Card Cages

Model Number	Product Description	MSRP
2RU Rack Mount for MCLN/MCGN Series		
FR2-12-NNN-B	2RU 19" passive module rack for up to 12 MCLN/MCGN series media converter modules.	105.00
FR2-16-ABN-B	2RU 19" chassis card cage for powering up to 16 MCLN/MCGN series media converter modules. 0°C to 50°C (32°F to 122°F) operating temp. US power plug.100-120VAC, 50/60Hz,	735.00
FR2-15-ABP-B	2RU 19" chassis card cage with redundant power supply for powering up to 15 MCLN/MCGN series media converter modules. 0°C to 50°C (32°F to 122°F) operating temp. US power plug.100-120VAC, 50/60Hz,	840.00
Chassis Cages, 3RU		
FR3-AB	3RU 19" chassis card cage for up to 14 single width modules. US power plug.100-120VAC, 50/60Hz,	840.00
FR3-AB-RP	3RU 19" chassis card cage for up to 12 single width modules. Includes redundant power supply. US power plug.100-120VAC, 50/60Hz,	1,470.00
PSA100-5-B	3RU replacement power supply unit. 100~120VAC, 50/60Hz.	630.00
PSA200-5-B	3RU replacement power supply unit. 200~240VAC, 50/60Hz.	630.00
Chassis Cages, 4RU		
FR4-AB	4RU ASFOM 19" chassis card cage for up to 14 single width modules. US power plug.100-120VAC, 50/60Hz,	1,180.00
FR4-AB-RP	4RU ASFOM 19" chassis card cage for up to 12 single width modules. Includes redundant power supply. US power plug.100-120VAC, 50/60Hz,	1,810.00
PSA100-5-C	4RU replacement power supply unit. 100~120VAC, 50/60Hz.	840.00
PSA200-5-C	4RU replacement power supply unit. 200~240VAC, 50/60Hz.	840.00
Rack Mount Option		
R1U	1RU rack mount.	315.00
R2U	2RU rack mount.	630.00

ASFOM - Application Specific Fiber Optic Modems

At KBC, we understand that applications in the real world rarely fit in pre-packaged increments and appreciate the cost of unused capacity. With ASFOM you choose the number of channels and mix of signal types, and we will package your design into a standard module using only 1 fiber in most cases. Available in point-to-point and repeater bus configurations, ASFOM can accommodate up to 128 video signals or combinations of video, audio, data, contact closure, telephone, and Ethernet on a single fiber. Please contact KBC Networks for details and configuration assistance.

About Model Numbers

Due to variations in geographic locations and system applications, KBC Networks offers many options in the configuration of models. Accordingly, the suffix of our product model numbers describes options available in their packaging. Default configurations are listed in this price schedule. Please contact your sales representative for assistance with special configuration requirements.

For example, referencing the table below, model FDVA1-M1T-**MSA** indicates the unit is configured in compact form factor, with ST connector, and US style power plug.

First digit (**x**) – packaging / form factor:

- W** Wall mount/desktop configuration
- M** Compact format
- R** 1U or 2U 19" rack mount (additional charges apply for Standard Digital models)
- A** 2U chassis card (for Media Converter series)
- B** 3U chassis card (for Standard Digital series)
- C** 4U chassis card (for ASFOM series)

Second digit (**y**) – fiber connector type used:

- F** FC connector
- S** ST connector
- C** SC connector
- L** LC connector

Third digit (**z**) – power plug type used:

- A** US power plug type B (3-pin grounded) or type A (2-pin ungrounded), 100-127V, 15A
- B** UK power plug type G (220-240V, 13A, 3 pins)
- C** Euro power plug type F (220-240V, 16A, 2 pins)
- D** Special
- E** Australian power plug type I (220-240V, 10A, 2 or 3 pins)
- F** China power plug type I (220-240V, 10A, 2 or 3 pins)
- N** No power supply/adaptor

Support Services and Warranty Options

Model Number	Product Description	MSRP
Support Services and Extended Warranties		
KBC-FS-1	KBC Engineer Field Support for 1 day (8 hours). Does not include travel expenses.	1,575.00
KBC-FS-LOC	KBC technical field support for 0.5 days (up to 4 hours); Available only when customer site is within 2 hours drivetime from the assisting KBC support staff. Check with KBC for more details of nearest technical support contact.	840.00
WES4-SETUP	Pre-shipment wireless radio configuration; KBC default IP addresses and other settings. KBC will set the units for basic wireless communication out of the box. Limited documentation included to inform IP address per unit.	53.00
KBC-PRE-CONF	Pre-shipment custom wireless radio configuration and labelling service; includes map of the project and labels to match color-coded map (if/when site map provided to KBC before product is configured and ships).	105.00
PRECFG-PLUS	Pre-shipment custom wireless radio configuration and labelling service with enhanced warranty to cover (1) WES4 or WES3HTG series unit. Enhanced warranty allows provision for an advanced replacement upon request per service ordered within the 2-year original warranty. Original product warranty is not extended under this plan. Each enhanced warranty ordered is applied to any one WES4 / WES3HTG radio when multiple radios are on the order. Service must be ordered with one or more WES4 / WES3HTG series radios.	263.00

Appendix A - Warranty

KBC Networks extends the Limited Warranty to the original owner/purchaser of this product in accordance with the Warranty Policy posted in KBC Networks' website at www.kbcnetworks.com.

KBC Networks extends the following Limited Warranty to the original owner/purchaser of this product: if this product, or any part or portion thereof, shall prove upon examination by KBC Networks, to be defective in material or workmanship, KBC Networks will repair or replace such part or portion at KBC Networks' option. The warranty period on the repaired or replaced part or portion of this product shall be limited to the unexpired term of the original warranty. The buyer shall be responsible for all shipping and transportation of the product to KBC Networks for any performance under this warranty.

Conditions and Exceptions:

- a) Any accident to this product, any misuse or abuse, alternation, use in modified form, or any attempt to repair this product shall void this warranty. These conditions to the warranty include, but are not limited to, incorrect power connections, physical damage due to mechanical shock, exposure to moisture, and circuit modification;
- b) Should this product prove defective following purchase, the buyer, not the manufacturer, distributor, or retailer, assumes the entire cost of all servicing or repair, except as otherwise provided by the terms of this warranty;
- c) For breach of any written or implied warranty on this product, the buyer is limited to the following damages:
 - i. The cost of labor to repair or replace defective parts or portions of this product, and
 - ii. The cost of the repaired or replaced parts or portions of this product;
- d) No other expressed or implied warranties have been made or will be made on behalf of KBC Networks with respect to the sale, repair, installation, operation, or replacement of this product. KBC Networks disclaims any implied warranty of merchantability of this product or its fitness for any purpose, and the buyer agrees that this product is sold "as is" and that the entire risk of the quality and performance of this product is with the buyer, except as otherwise provided by the terms of this warranty;
- e) Some states/jurisdictions do not allow exclusions or limitations of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above exclusions or limitations may not apply to you;
- f) If you do not wish to be bound by any of the provisions in this warranty, please return the product(s) immediately.

This warranty does not apply in Australia.

Contact KBC Networks at info@kbcnetworks.com regarding return authorization for out of warranty repairs and any further product information.

Limitation of Remedies and Liabilities

The remedies provided herein are BUYER's sole and exclusive remedies. In no event shall KBC Networks be liable for direct, indirect, special, incidental, or consequential damages (including loss of profits), whether based on contract, tort, or any other legal theory. The foregoing limitation of liability shall not apply if any KBC Networks product sold hereunder is determined by a court of competent jurisdiction to be defective and to have directly caused bodily injury, death, or property damage, provided that in no event shall KBC Networks' liability for property damage exceed the greater of \$5,000 or the purchase price of the specific product that caused such damage.

Appendix B - Standard Terms and Conditions

Terms

Except as otherwise agreed to in writing by KBC Networks, Inc. ("KBC Networks"), these terms and conditions shall govern all sales promotion, advertising, or license of, and quotations covering purchase order for, products of KBC Networks, and any provision of the BUYER's order deemed inconsistent herewith shall be waived. All orders are subject to acceptance and approval in writing by KBC Networks.

Title and Delivery

Unless otherwise expressly provided herein, title passes to BUYER when products are delivered to the carrier. In all cases, risk of loss or damage to any such product in transit shall fall upon BUYER, whose responsibility it shall be to file claims with the carrier, which shall be deemed BUYER's agent. KBC Networks accepts no responsibility and shall not be responsible for such claims with the carrier. Unless KBC Networks receives specific shipping instructions from BUYER, which may subject BUYER to an additional charge, KBC Networks will exercise its own discretion in selecting the method of shipment.

Shipping dates are approximate and are based upon prompt receipt of all necessary documents from BUYER. KBC Networks reserves the right to make deliveries of product by installments, and when KBC Networks cannot deliver the full amount of all orders on the agreed schedule, the right to allocate production lots among its various BUYERS then under contract for similar goods, in a commercially reasonable manner. KBC Networks shall not be liable for delays in delivery, non-delivery, or other defaults by reason of any strike, lockout, accident, fire, flood, delays of carrier, acts of God, acts of BUYER, acts of civil or military authority, inability to obtain necessary fuel, power, labor, materials, or manufacturing facilities, or any other cause, occurrence, or contingency beyond the reasonable control of KBC Networks. Nor shall KBC Networks be liable for any special or consequential damages caused by any delay in delivery or failure to manufacture or deliver.

Price Quotations

Unless otherwise agreed to in writing by KBC Networks, all quotations expire thirty (30) days after the date of the quotation or at the end of the ordering period of any quantity discount agreement against which the quotation is issued, whichever date is earlier. All prices quoted are valid only if BUYER's requested delivery date (including change orders) is within three (3) months of the date on which the original order is placed. Prices stated do not include freight and any federal, state, municipal, or other government tax now or hereafter imposed upon the production, storage, sale, taxes, the BUYER, or in lieu thereof, the BUYER shall provide a tax exemption certificate acceptable to the taxing authorities.

Use of KBC Networks Name, Logos, Product Images, and Related Materials

Use of the KBC Networks name, tradenames, logos, product images, and related information (in print-and/or electronic-forms) (collectively "KBC Networks Property") is limited to BUYERS who have completed the Customer application process and are customers in good standing.

KBC Networks grants BUYER permission to use the KBC Networks Property subject to the following conditions: (1) all advertising of BUYER clearly indicates that it is advertising of BUYER, and is not advertising of KBC Networks; (2) BUYER's advertising does not imply or suggest an association between BUYER and KBC Networks other than that of buyer and seller; (3) BUYER's use of the KBC Networks Property positively represents KBC Networks and KBC Networks' equipment and related services in a professional manner; (4) BUYER's trade name is more predominant on BUYER's advertising than KBC Networks trademarks; (5) the appropriate trademark notice (™ or ®) appears adjacent all KBC Networks federally registered trademarks; (6) the Trademark Statement below appears in or at the end of all advertising wherein any KBC Networks trademarks are used; (7) no modifications of any KBC Networks Property are made; and (8) only product pricing within ten percent (10%) of KBC Networks' MSRP may be used for direct marketing or E-commerce promotion activities. Use for any other purpose is expressly prohibited and may result in severe civil and criminal liabilities.

The use of KBC Networks Property is authorized ONLY for promotion and sale of KBC Networks products. Use of KBC Networks Property does NOT imply any business association with KBC Networks, other than that of buyer and seller.

KBC Networks reserves the right to review BUYER's advertising and may: (1) specify and require changes to the advertising as a condition of use; or (2) refuse or revoke permission to use KBC Networks Property by BUYER.

When KBC Networks trademarks are used for the purpose of demonstrating an association between another company and KBC Networks, permission is granted for their use provided that: (1) the applicable legend, "Authorized KBC Networks Dealer," "Authorized KBC Networks Distributor," or "Authorized KBC Networks Systems Integrator" appears below BUYER's tradename; and (2) KBC Networks has not specifically denied permission to BUYER.

KBC Networks trademarks may not be used in any way that gives the impression that BUYER is part of KBC Networks, or is the EXCLUSIVE Agent, Dealer, or Distributor for KBC Networks.

Permission to use KBC Networks Property for any other purpose is not granted and must be specifically obtained in writing from the KBC Networks Sales and Marketing Department.

KBC Networks reserves the right to deny or revoke permission to use any of the KBC Networks Property for any or no reason at any time.

KBC Networks, Inc., the KBC Networks, Inc. logos, "MiniLink", "ThruLink" and "eCopper" are either trademarks or federally registered trademarks of KBC Networks.

Any rights not expressly granted herein are reserved by KBC Networks.

The following Trademark Statement must appear on any document that contains a KBC Networks trademark: "[the appropriate KBC Networks trademark(s)] is a (are) trademark(s) of KBC Networks – San Juan Capistrano, CA, and may be registered in certain jurisdictions."

Questions regarding use of KBC Networks Property should be directed to the KBC Networks Sales and Marketing Department.

Changes

By mutual agreement, an order may be suspended, or changes may be made in quantity, specifications, place of delivery, or methods of shipment and packaging. If any such change causes an increase or decrease in the price of the equipment or in the time required for delivery, KBC Networks shall promptly notify the BUYER and assert its claim within thirty (30) days from the date the change is agreed upon, and an equitable adjustment shall be made. In any event, changes shall not be binding upon, nor be put into effect by, either party unless confirmed in writing by its appropriate representative.

Payment

Unless special terms are requested from and agreed upon by KBC Networks, all orders shall require 100% prepayment before product is shipped. Prepayment shall be made in U.S. dollars and may be in the form of wire transfer, approved credit card transaction, approved checks and drafts, money order, C.O.D., funds on account or any other transfer of funds satisfactory to KBC Networks. In the case of checks and drafts, shipment will be made only after funds have cleared KBC Networks' bank.

When KBC Networks has extended credit to BUYER, invoices will be issued under date of shipment with terms of net thirty (30) days from date of invoice, subject to such changes as KBC Networks may impose because of financial or credit conditions existing at time of shipment. In the event of an order for several units, each unit will be invoiced when shipped. Interest will be added to and be payable at the rate of 1.5% per month on all invoices not paid when due. Payment shall be made in U.S. dollars and may be in the form of wire transfer, approved credit card transaction, approved checks and drafts, money order, funds on account or any other transfer of funds satisfactory to KBC Networks. All credit card transactions over \$5,000 U.S. dollars are subject to a credit card handling fee of 3.5% of the invoice value. KBC Networks reserves the right to modify these terms and conditions for export business and special projects.

Shortages, Returns and Advance Replacements

All claims for shortages, defective, or incorrect products must be filed with KBC Networks by BUYER within fifteen (15) days of receipt of the product. A Return Material Authorization (RMA) number must be obtained by BUYER from KBC Networks prior to return of merchandise and must be written on the package returned and referred to in all related correspondence. KBC Networks standard products, as listed in KBC's published price list, may be returned within thirty (30) days of shipment provided the products are in like new condition and in the original packaging. Any product older than thirty (30) days will be repaired and returned in accordance with KBC Networks' warranty. All requests for advance replacements will require a new purchase order. PLEASE NOTE: Custom Orders, including but not limited to ASFOM, E-BUS, 10-Bit Video, solar power kits, are Non-Returnable.

Patented and Copyrighted Materials

Unless otherwise agreed to in writing by KBC Networks, copyrighted materials (printed documentation) may not be copied.

Proprietary Information

All proprietary information, specifically designated as such, which is disclosed by either party to the other in connection with purchase order, shall be used solely for purposes of the purchase order and shall be protected by the recipient from disclosure to others with the same degree of care as that accorded to the recipient's own proprietary information. Information will not be subject to this provision if (1) it is or becomes a matter of public knowledge without the fault of the recipient party; (2) it was a matter of written record in the recipient party's files prior to disclosure of it by the other party; (3) it was or is received by the recipient party from a third party under circumstances permitting its disclosure; or (4) its disclosure is required by a government agency.

Protection

KBC Networks shall defend any litigation resulting from sales of its products/equipment if the litigation is based on a claim that KBC Networks' equipment or any part of it furnished hereunder constitutes in itself any patent infringement. BUYER shall notify KBC Networks upon its obtaining notice of such an impending claim and shall cooperate fully with KBC Networks in preparing a defense. KBC Networks shall pay all damages and costs awarded therein against BUYER on grounds of patent infringement and shall reimburse BUYER for any expense it incurs on KBC Networks' written request and authorization. If KBC Networks' equipment or any part thereof is held to constitute patent infringement and the use thereof is enjoined, KBC Networks shall, at its own expense, either procure for the BUYER the right to use KBC Networks' equipment or replace it with equipment that does not constitute patent infringement. KBC Networks shall not have any liability to BUYER under any provision of this document if any patent infringement or claim thereof, is based upon the use of KBC Networks' equipment in combination with equipment or devices not made by KBC Networks, or in a manner for which KBC Networks' equipment was not designed. The foregoing states the entire liability of KBC Networks with respect to patent infringement relating to KBC Networks' equipment, or any part thereof, ordered by BUYER.

Miscellaneous

BUYER's purchase or license of KBC Networks' products represents acceptance of KBC Networks' terms and conditions as stated herein. These Standard Terms and Conditions constitute the entire understanding of the parties and supersede all prior communications between the parties.