Fiber Optics Module

Plastic Fiber 650 nm OptoLock^{TM} to RJ45 100BaseFX to 10/100BaseT/TX Triple Fiber Media Switch

KMS-P100FX3-G1
KMS-P100FX3-G2

FEATURES

- Triple plastic fiber 650 nm link port, Link span up to 50 m
- Single RJ45 copper port for UTP cable link up to 100 m.
- Comply with IEEE 802.3 Ethernet and IEEE 802.3u Fast Ethernet
- Store and Forward Switching with 1K MAC address table
- Easy use fiber connector with visible light source
- Plastic optical fiber (POF) home application
- Auto MDI/MDI-X on UTP port
- 10/100 Mbps auto-negotiation on UTP
- **Full/Half duplex mode on UTP**
- RoHS compliance

OptoLock^{TM} is a trademark of Firecomms.

KMS-P100FX3-G1/2 is a media switch with triple OptoLock^{TM} POF ports and single RJ45 copper port. It performs normally as a layer 2 switch with 50 m communication distance on POF for an all-fiber home application. The link distance on copper port is 100 meters for all Cat. 5e UTP cables. The equipped auto-negotiation function enables the data transmission to operate at 10 or 100 Mbps copper Fast Ethernet and the 100 Mbps fiber. This device complies with IEEE802.3 and IEEE802.3u standards with two different network connection media, 10/100Base-TX and 100Base-FX. KMS-P100FX3-G1 is for 1.5 mm POF while KMS-P100FX3-G2 for 2.2 mm, respectively.

KMS-P100FX3-G can be used for home or small office use on all fiber networks. Triple fiber ports can be used to establish the fiber network connecting to computer, modem, and multimedia applications. Switching functions will be automatically invoked when source and destination addresses are clearly specified.

KMS-P100FX3-G is a RoHS compliant product.

Media Switch Specifications

Copper

Standard:	IEEE 802.3 and IEEE 802.3u
Connectors:	RJ45 x 1
Impedance:	100 Ohm

Fiber Optic

Source:	RCLED
Wavelength:	650 nm
Connector:	OptoLock^{TM} x3 for 1.5 or 2.2 mm POF
Optical Budget:	15 dB typ.
Sensitivity:	-22 dBm typ.
Maximum Distance:	50 m on plastic optical fiber

Required Power Supply

Output Voltage:	5 VDC
Output Current:	550 mA max.
Polarity:	Inner pin positive
Size of Connector:	ID = 1.35 mm, OD = 3.5 mm, Length of pin (min.) = 10 mm

Accessories

100 to 240 VAC, 50 to 60 Hz to 5VDC 1.2A power adapter

Physical and Environmental Specifications

Dimensions:	(H) 20 mm x (W) 84mm x (D) 60 mm
Weight:	250 g (0.55 lbs.) per unit
Operating Temp:	0° C to 50° C for media switch and 0° C to 42° C for power adaptor
Storage Temp:	-10° C to 70° C (-13° F to 158°F)

Agency Approvals

This media converter conforms to the following standards:

Electromagnetic Emissions:	FCC Part 15, Class A, EN 55022, Class A

Ordering Information

KMS-P100FX3-G1	3x 100M 1.5 mm POF to RJ45 100BaseFX to 10/100BaseT/TX media switch
KMS-P100FX3-G2	3x 100M 2.2 mm POF to RJ45 100BaseFX to 10/100BaseT/TX media switch

Important Notice

Before using this product, you must evaluate it and determine if it is suitable for your intended application. You assume all risks and liability associated with such use.

Warranty; Limited Remedy; Limited Liability

This product will be free from defects in material and manufacture for a period of one year from the date of purchase