FCAT®01



# Fast Ethernet Media converter



FCAT® 01

The **FCAT**®**1** series of Fast Ethernet Media converters provides media conversion from 10/100BASE-T to 100BASE-FX on multimode or single mode fiber ranging from 2km to 100kms. Available in Managed, Unmanaged, Stand Alone/Rack, AC/DC Power supplies & a versatile range of Fiber Optic interfaces **FCAT**®**1** series becomes a complete offering to suit Carriers, Service Providers & Enterprises for wide range of deployments.

#### **Key Features**

- Single channel stand-alone media converter
- I0/I00BASE-T to I00BASE-FX media conversion
- Auto MDI-I/MDI-X copper Ethernet port
- DIP switch configuration for copper Ethernet port
- SC connector for I00BASE-FX fiber port
- Link, Activity & Speed LED indications
- Supports Multimode, Single mode & Single fiber
- Long haul transmission upto 100 kms support
- LFP (Link Fault Pass through) allows the fiber failure to be propagated to the copper port

#### **Rack Features**

- 19-inch enclosure, 4U
- Hot swappable dual channel line modules
- 12 line modules support in a single rack
- Maximum port density upto 24
- DIP switch for copper Ethernet port configuration
- Houses Fast Ethernet (2-ch) / Gigabit Ethernet line cards
- AC or DC power supply option
- Redundant and load sharing power supply

#### **Description**

Ethernet is now poised to be the preferred broadband access technology between carrier and customer networks. It will save carriers a fortune in CAPEX and help them deliver more bandwidth which means more customers and more revenue than today.

FCAT®01, the Unmanaged Media converter from MRO-TEK supports a variety of advanced features and flexible interface options, giving service providers the power to quickly and profitably deploy Ethernet services. Enterprise customers can leverage existing Ethernet infrastructure for long haul connects.

**FCAT**<sup>®</sup>**01** is a rugged and reliable Fast Ethernet media converter providing seamless extension of Fast Ethernet on single mode/multimode fibre ranging from 2kms to 100kms.

**FCAT**<sup>®</sup>**D1**, available in stand-alone and rack mount options enable carriers or enterprises for seamless integration of Fast Ethernet long haul connectivity solutions. The rack chassis can be populated with dual channel line modules in a standard 19-inch rack.

The high density rack chassis supports upto 12 line modules providing upto 24 independent Fast Ethernet connects. Hot-swappable line modules & redundant power supplies supplements high availability and ease of serviceability. The copper ports on the rack line modules can be configured for link speed using DIP switches on the front panel.

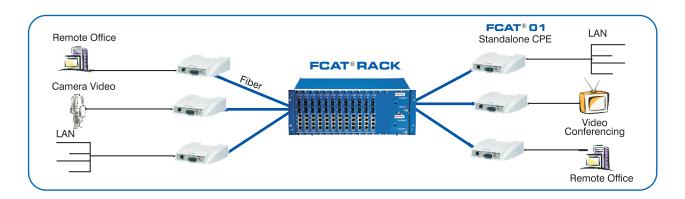
**FCAT**<sup>®</sup>**D1** range of stand-alone Fast Ethernet media converters are available in Plastic enclosures with internal/external power supply options.

FCAT®01 supports multimode, single mode and single fiber long haul transmissions. Single fiber option is available for 15km & 40 km and long haul transmission support is available upto 100 kms.

The LFP (Link Fault Pass through) feature allows the fiber failure to be propagated to the copper port. The flexibility to adapt to different connectivity needs makes it an essential component of any network design.

### **Application**

FCAT®D1 rack is designed for demanding network environments with high density termination to provide high speed and reliable connects. FCAT®D1 range of products can be typically used in a LAN, MAN or a Campus Network. The unique feature LFP (Link Fault Propagation) propagates the fiber link failure to the copper port thereby switching off the links of both the ports providing failover on a redundant path.





# **Technical Specifications**

Standard Compliance
 IEEE 802.3u, 10/100BASE-T, 100BASE-FX

5 10/100BASE-T port Shielded RJ-45 Half/Full Duplex support Auto MDI-I / MDI-X

100BASE-FX port :

SC Connector

LED indications (Stand-alone & rack line cards)
 Link, Activity & Speed

Power

Stand alone

100 to 250 VAC, 10 W -36 to -72 VDC, 10 W Adaptor 5V, 1A

Rack

100 to 250 VAC, 200W -36 to -72 VDC, 200 W

• Operating Temperature :  $0^{\circ}$ –  $50^{\circ}$ C /  $32^{\circ}$ –  $122^{\circ}$ F

• Humidity :

10% to 90%, non-condensing

Physical Dimensions :

Stand alone - 156 x 154 x 43 mm Stand alone (compact) - 50 x 79 x 25 mm

Rack-12: 482 x 267 x180 mm

# Fiber optic specifications

Module Type	Wavelength (nm)	Fiber Type (µm)	Typical Tx Power (dBm)	Typical Rx Sensitivity (dBm)	Typical Range (Kms)
MM	850	62.5/125 Multimode	-6.5	-20	2
MM	850	50/125 Multimode	-6.5	-20	2
SM15	1310	9/125 Single mode	-12	-29	15
SM40	1310	9/125 Single mode	-2.5	-29	40
SM75	1550	9/125 Single mode	-2.5	-29	75
SM100	1550	9/125 Single mode	0	-30	100
SF15	1310/1550	9/125 Single mode SF	-9.5	-27	15
SF40	1310/1550	9/125 Single mode SF	-2.5	28	40

# Ordering FCAT® 01

	FCAT01/SA/#/SC/~		Single channel Stand-alone 10/100BASE-TX/FX media converter	
	FCAT01/SA/#/SC/CAD		Compact Single channel Stand-alone 10/100BASE- TX/FX media converter with External AC Adaptor	
	FCAT02/R/#/SC		Dual channel 10/100BASE TX/FX media converter line module for FCAT Racks	
	FCAT-RACK-12/?		19" enclosure for 12 rack line cards	
#	MM for MM fiber 2Km	~	AC for AC power supply	
	SM15 for SM fiber 15Km		DC for DC Power Supply	
	<b>SM40</b> for SM fiber 40Km			
	<b>SM75</b> for SM fiber 75Km			
	SM100 for SM fiber 100Km			
	<b>SF15 (1310Tx/1550Rx)</b> for SM (1310Tx/1550Rx) fiber 15Km			
	SF15 (1550Tx/1310Rx) for SM (1550Tx/1310Rx) fiber 15Km			
	<b>SF40 (1310Tx/1550Rx)</b> for SM (1310Tx/1550Rx) fiber 40Km			
	<b>SF40 (1550Tx/1310Rx)</b> for SM (1550Tx/1310Rx) fiber 40Km			
?	<b>230</b> for one AC power supply			
	230/230 for two AC power supplies			
	<b>48</b> for one DC power supply			
	48/48 for two DC power supplies			







#### **MRO-TEK Limited**

Bellary Road, Hebbal Bangalore - 560 024, INDIA Phone: +91-80-23332951 Fax: +91-80-23333415 Email: mrotek@vsnl.com Web: www.mro-tek.com