# Managed Family Slide-in card & stand-alone Gigabit Ethernet fiber converters FRM301-1000TS, 1000TG FIB1-1000TS, 1000TG, FIB2-1000TG

The FRM301-1000TS and 1000TG are transparent Gigabit Ethernet 1000Base-T to 1000Base-SX/LX SFP or GBIC. They are managed (when installed in FRM301 with management) or non-managed stand-alone media converters, which give you the options to choose from a wide range of industry standard SFP modules with LC connectors. SFPs in multi-mode and single mode models are available as well as BiDi which allows bi-directional transmissions using only a single fiber cable. Because they are completely transparent to Ethernet packets, they are able to support any size frames, including undersized or jumbo packets (9K bytes). LED indicators signal the power status of the converter, UTP port speed, Link, and duplex status, FX port Link and duplex status.

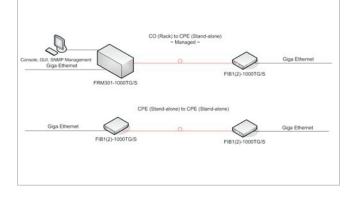
#### Features

- 1000Base-T to 1000Base-SX/LX
- Network management via terminal or SNMP in FRM301-CH chassis
- Auto-negotiation or forced mode
- Auto MDI/MDIX
- Forward 9k bytes (Max.) packets
- Support Link Fault Pass through (LFP) function
- Auto Laser Shutdown (ALS)

### **Specifications**

PortsConnector : $1 \times 9 (SC, ST, FC)$ Optical Interface :Data rate : $100Mbps$ Duplex mode : Full duplexCable type :MM 62.2/125µm, 50/125µm.SM 9/125µmSM 9/125µmDistance :MM 2km, SM 15/30/50/80/120km, WDM 20/40/60/80kmWavelength: $1310nm, 1550nm$ Electrical Interface :Connector :RJ45Data rate :Data rate : $10Mbps, 100Mbps$ Duplex mode:Half / Full duplexCable type : $10Base-TX Cat.5, 5e$ Distance: $100$ metersStandardIEEE 802.3, IEEE 802.3uLEDsPower, FX Link, FX Duplex, TX SPD, TX Link, TX DuplexPowerFIB1:DC In 9V, FIB2:AC 100 ~ 240V/ DC 24 ~ 72VPower Consumption< 4WDimensionsFRM301/FIB1: 123 x 86 x 20mm(D x W x H)mmFIB2: 192 x 86 x 30mmWeightFRM301: 290g, FIB1: 340g, FIB2: 550gTemperature $0-50^{\circ}C$ (Operating) , $0-70^{\circ}C$ (Storage)Humidity $10-90\%$ non-condensingCertificationCE, FCC, RoHSMTRE65 000 h (25°C)	Specifications			
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$\begin{tabular}{ c c c c c } & SM 9/125 \mu m \\ \hline Distance : MM 2km, SM 15/30/50/80/120 km, \\ & WDM 20/40/60/80 km \\ \hline Wavelength: 1310nm, 1550nm \\ \hline Connector : RJ45 \\ \hline Data rate : 10Mbps, 100Mbps \\ \hline Duplex mode: Half / Full duplex \\ \hline Cable type : 10Base-T Cat.3, 4, 5, UTP, \\ 100Base-TX Cat.5, 5e \\ \hline Distance: 100 meters \\ \hline Standard \\ IEEE 802.3, IEEE 802.3u \\ \hline LEDs \\ Power, FX Link, FX Duplex, TX SPD, \\ TX Link, TX Duplex \\ \hline Power \\ FIB1:DC In 9V, FIB2:AC 100 ~ 240V/ DC 24 ~ 72V \\ \hline Power Consumption \\ < 4W \\ \hline Dimensions \\ FRM301/FIB1: 123 x 86 x 20mm \\ \hline (D x W x H)mm \\ FIB2: 192 x 86 x 30mm \\ \hline Weight \\ FRM301: 290g, FIB1: 340g, FIB2: 550g \\ \hline Temperature \\ 0~50^{\circ}C (Operating), 0~70^{\circ}C (Storage) \\ \hline Humidity \\ 10~90\% non-condensing \\ \hline Certification \\ CE, FCC, RoHS \\ \hline \end{tabular}$		Duplex mode : Full duplex		
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	Humidity	10~90% non-condensing		
MTBE 65.000 h (25°C)	Certification	CE, FCC, RoHS		
00,000 H (20 0)	MTBF	65,000 h (25°C)		

### Application



## **Ordering Information**

- FRM301-1000TS
- FIB1-1000TS
- FRM301-1000TG
- FIB1-1000TG
- FIB2-1000TG
- 1000Base-TX to 1000Base-SX/LX SFP slide-in card
- 1000Base-TX to 1000Base-SX/LX SFP stand-alone converter
- 1000Base-TX to 1000Base-SX/LX GBIC slide-in card
- 1000Base-TX to 1000Base-SX/LX GBIC stand-alone converter
  - 1000Base-TX to 1000Base-SX/LX GBIC with AC or DC power built-in

