

FTG-C12G-10M

GBIC 1000Base-T, RJ-45, 100m



Description

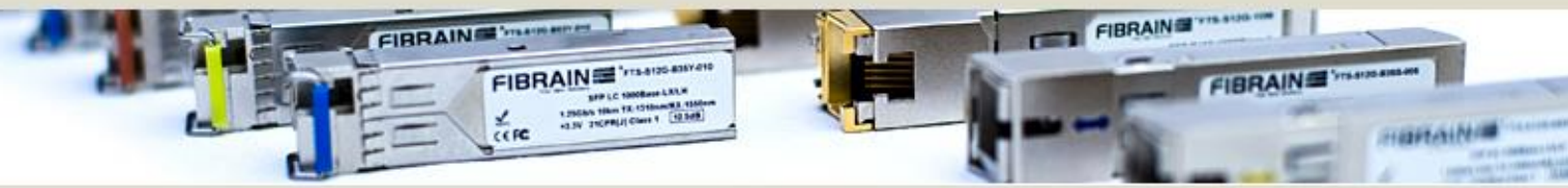
FTS-C12G-10M GBIC transceiver can be used to setup a reliable Gigabit Ethernet link over UTP cable (cat. 5e or higher). Maximum transmission distance can reach up to 100 meters. Transceiver is fully compliant with GBIC MSA specifications, host device can access information about module via I²C interface. Module can be prepared as compatible with: Cisco, HP, Netgear, Avaya, D-Link, Brocade, Extreme Networks, Huawei, Enterasys, 3Com, Alcatel-Lucent and other. To confirm compatibility please contact technical support before ordering.

Applications

- Gigabit Ethernet (1.25Gbps)

Key features

- RJ-45 connector
- Transmission distance up to 100m
- Throughput up to 1.25Gb/s (Gigabit Ethernet)
- Fully compliant with GBIC MSA INF-8053 rev. 5.5
- Hot-Pluggable
- RoHS compliant
- Low power dissipation (<1W)
- Operating case temperature : 0~70°C



Specification

Supported transmission technology

Gigabit Ethernet

Speed supported for Ethernet technology

1.25Gbps

Transmission medium

Copper Cat 5e. or higher

Transmission distance

100m

Receptacle type

RJ-45 connector

Power supply voltage

5V

Total power consumption

< 1W

Operating environment – temperature

0~70°C

Operating environment - humidity

5~95% non-condensing

Dimensions

109.7mm × 17.8mm × 39.4mm

Electrical parameters

Parameter	Symbol	Min.	Typ.	Max.	Unit	Notes
Transmitter Differential Input Volt	+/-TX_DAT	650		2000	mV p-p	1
Receiver Differential Output Volt	+/-RX_DAT	400		2000	mV p-p	2
Tx_Disable Input Voltage – Low	V _{IL}	0		0.8	V	
Tx_Disable Input Voltage – High	V _{IH}	2.0		V _{CC}	V	
Tx_Fault Output Voltage – Low	V _{OL}	0		0.8	V	3
Tx_Fault Output Voltage – High	V _{OH}	2.0		V _{CC}	V	3
Rx_LOS Output Voltage- Low	V _{OL}	0		0.8	V	3
Rx_LOS Output Voltage- High	V _{OH}	2.0		V _{CC}	V	3
Throughput	B		1250		Mb/s	
Total current requirement				250	mA	

Notes:

1. Internally AC coupled and terminated to 100Ω differential load.
2. Internally AC coupled, but requires a 100Ω differential termination or internal to Serializer/Deserializer.
3. It is open collector/drain output which should be pulled up externally to V_{CC} with a 4.7KΩ-10KΩ resistor on the host board. LOS: logic 0 indicates normal operation; logic 1 indicates no signal detected.

Recommended environment conditions

Parameter	Symbol	Min	Typ	Max	Unit
Operating Temperature Range (standard)	T	0	25	70	°C
sSupply Voltage	V _{CC}	4.75	5	5.25	V
Relative Humidity	RH	5	-	95	%

For further information regarding host device PCB layout recommendation, power supply requirements, EEPROM memory map please check:

[INF-8053 - Technical specification for GBIC transceiver](#)

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Pictures used for reference only, actual product look may differ. For most actual information please contact technical support via aktywa@fibrain.pl

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