## SFP modules for fiber optic transmission

The GBIC series



CODE: **GBIC-106** 1.0/l

NAME: SFP GBIC-106 module, single-mode, 1,25G, Tx:1550 / Rx:1310, LC, 20KM, DDM (TORNADO)

## Features:

- Supported optical fiber single-mode
- Single fiber transmission (Wavelength-division multiplexing, WDM technology)
- Transmission speed 1.25Gb/s (IEEE 802.3z 1000Base-FX)
- Transmission range up to 20km
- Optical fiber type LC
- Warranty 2 years from the production date



## **DESCRIPTION**

SFP modules (Small Form-factor Pluggable) commonly referred to as GBIC (Gigabit Interface Converter) convert an electrical signal into an optical signal.

The GBIC-106 Tornado input/output device is a module designed for up to 20km single (SM) mode fiber transmission. Wavelength 1550nm, Wavelength 1310nm, transmission speed 1,25Gb/s.

The module has two LC sockets with snap-lock system to prevent the connector from pulling out.

| TF | $\sim$ L | IAI | 10 | ΛІ | $\mathbf{r}$ | Λ7 | ГΛ |
|----|----------|-----|----|----|--------------|----|----|
|    |          | IIV |    | 41 |              | _  | -  |

| Optical fiber type:      | Single-mode (SM) (8.3/125μm, 8.7/125μm, 9/125μm, and 10/125μm) |  |  |  |  |
|--------------------------|--|--|--|--|--|
| Transmission speed:      | 1.25 Gb/s  |  |  |  |  |
| Transmission range:      | Up to 20 km  |  |  |  |  |
| Connectors type:         | LC   |  |  |  |  |
| Wavelength Tx:           | 1550 nm  |  |  |  |  |
| Wavelength Rx:           | 1310 nm  |  |  |  |  |
| Tx power/Rx sensitivity: | -83 / ≥ -22 dB   |  |  |  |  |
| Standards and protocols  | (IEEE 802.3z 1000Base-FX)                                      |  |  |  |  |
| Digital Diagnostics:     | DDM  |  |  |  |  |
| Operation temperature:   | 0 70°C   |  |  |  |  |
| Operation humidity:      | 085%   |  |  |  |  |
| Power supply:            | DC 3.3V (power from SFP port )                                 |  |  |  |  |
| Warranty:                | 2 year from the production date                                |  |  |  |  |

## **APPLICATION**

The SFP module has a built-in Digital Diagnostics Monitoring (DDM), which allows the user to monitor the basic parameters of the module's operation in real time. These include, among others, Supply Voltage, Temperature, optical power of signal transmitted by the transmitter, and the power of signal received by the receiver.

This module is designed to operate with devices of different manufacturers that do not have security systems. The module operates, among others, with TP-LINK, ULTIPOWER, or CISCO devices. This SFP module is not compatible with devices of manufacturers that have security systems.

Proper communication with other devices requires the use of the GBIC-105 module.

