CODE: **GBIC-104**    1.0/I                                                                **EN**

NAME:    **SFP GBIC-104 module, single-mode, 1,25G, Tx:1550 / Rx:1310, SC, 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 – SC
- Warranty – 2 years from the production date

CE

## 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-104 Tornado input/output device is a module designed for up to 20km single (SM) mode fiber transmission. Wavelength TX 1550nm, Wavelength RX 1310nm, transmission speed 1,25Gb/s.

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

## TECHNICAL DATA

| | |
|---|---|
| **Optical fiber type:** | Single-mode (SM) (8.3/125µm, 8.7/125µm, 9/125µm, 10/125µm) |
| **Transmission speed:** | 1.25 Gb/s |
| **Transmission range:** | Up to 20 km |
| **Connectors type:** | S.C. |
| **Wavelength Tx:** | 1550 nm |
| **Wavelength Rx:** | 1310 nm |
| **Tx power/Rx sensitivity:** | -8...-3 / ≥ -22 dB |
| **Standards and protocols** | IEEE 802.3z 1000Base-FX |
| **Digital Diagnostics:** | DDM |
| **Operation temperature:** | 0... 70°C |
| **Operation humidity:** | 0...85% |
| **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-103 module**.

Optical fiber
1310nm            1xSM

1550nm

GBIC-103                                                                GBIC-104