



SFP+ 1/10GbE  
Transceiver, 2 MM fibers  
LC/UPC

SFP+ (Small Form-Factor Pluggable) transceiver module for network equipment, with LC/UPC Duplex connector. It allows extending the ethernet network up to 300 m through two multimode (MM) optical fibres, each operating in the 850 nm window.

It can connect to both SFP and SFP+ ports, thanks to its Dual-Rate capability that adapts the transmission speed between 1 and 10 Gbps depending on the port used. In addition, its SFP+ MSA compatibility improves interoperability with different manufacturers and facilitates digital monitoring of the device's operating parameters.

Designed for applications requiring high transmission capacity, such as switch-to-switch Ethernet connections, router or server interfaces, uplink connections and linking client equipment with Deza Series and Tambo Series equipment in optical transport networks.

|                     |               |
|---------------------|---------------|
| <b>Ref.</b>         | 291221        |
| <b>Logical ref.</b> | SFP+850_100M  |
| <b>EAN13</b>        | 8424450320495 |

## Physical data

|            |        |                            |                      |
|------------|--------|----------------------------|----------------------|
| <b>Bag</b> | 1 pcs. | <b>Net weight</b>          | 50.00 g              |
|            |        | <b>Gross volume</b>        | 0.20 dm <sup>3</sup> |
|            |        | <b>Gross weight</b>        | 65.00 g              |
|            |        | <b>Width</b>               | 57.00 mm             |
|            |        | <b>Height</b>              | 14.00 mm             |
|            |        | <b>Depth</b>               | 13.00 mm             |
|            |        | <b>Main product weight</b> | 50.00 g              |

## Highlights

- Reduced deployment cost by using multimode fibre
- Compatibility with SFP and SFP+ ports, thanks to its Dual-Rate 1 or 10 Gbps rate
- Real-time parameter monitoring thanks to DDM/DOM compatibility
- Hot-swappable module, so it connects without interrupting system operation
- Range up to 300 m on fibre links
- Simplified integration with equipment from various manufacturers under the MSA standard

## Discover

### What is a SFP?

The Small Form-Factor Pluggable (SFP) devices are adapters that generate an interface to allow access to an Ethernet signal through Optical Fiber. These devices can be connected to the inputs of different Ethernet and GPON equipment, allowing the transmission/reception of the information by connecting to single-mode or multi-mode fiber or Ethernet cables.

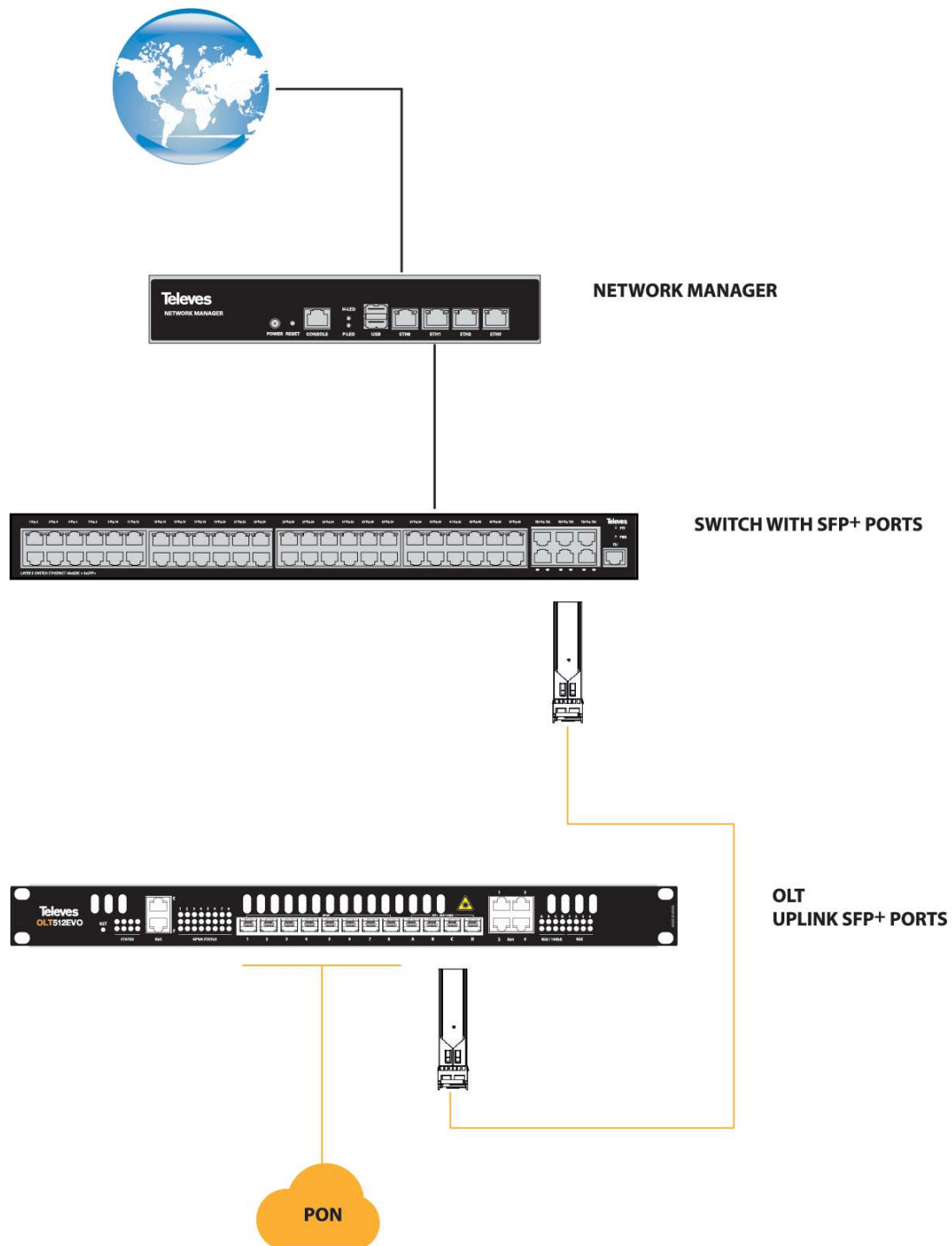
Among the advantages of using SFP modules, we can highlight the reduction of space, lower energy consumption, or the increase of transmission distances.

## Which SFP do I need?

Based on the devices to which they are connected, the transmission speed, or the type of cable used, several options are available in the whole range of media converters. The compatibility between the SFPs and the different Ethernet and GPON equipment is described below.

|                                                                                      | 1GbE Transceivers |        |        | 1/10GbE Transceiver | 10GbE Transceivers |        | 1GbE RJ45 Transceiver | ONU    | GPON Transceivers |           |
|--------------------------------------------------------------------------------------|-------------------|--------|--------|---------------------|--------------------|--------|-----------------------|--------|-------------------|-----------|
|                                                                                      | 769150            | 769210 | 769212 | 291221              | 769214             | 769412 | 769411                | 769520 | 769410/13         | 769414/15 |
| <b>SFP Switches</b> (768115, 768116, 768150, 769140, 769141, 769144, 769147, 769152) | OK                | OK     | OK     | OK                  | -                  | -      | -                     | OK     | -                 | -         |
| <b>SFP+ Switches</b> (769145, 769146, 769148, 769149, 769151, 769152, 769153)        | OK                | OK     | OK     | OK                  | OK                 | OK     | -                     | OK     | -                 | -         |
| <b>SFP+ Routers</b> (769115, 769122)                                                 | OK                | OK     | OK     | OK                  | OK                 | -      | -                     | -      | -                 | -         |
| <b>OLT512EVO</b> (769403)                                                            | OK                | -      | OK     | OK                  | OK                 | OK     | OK                    | -      | OK                | OK        |
| <b>OLT3072</b> (769420, 769421, 769422)                                              | -                 | -      | OK     | OK                  | -                  | OK     | OK                    | -      | OK                | -         |
| <b>Media Converter</b> (769215)                                                      | OK                | OK     | OK     | OK                  | -                  | -      | -                     | -      | -                 | -         |
| <b>WaveData</b> (769002)                                                             | OK                | OK     | OK     | OK                  | -                  | -      | -                     | -      | -                 | -         |

## Application example



Technical specifications : Ref. 291221

|                              |     |                       |
|------------------------------|-----|-----------------------|
| Transceiver type             |     | SFP+                  |
| Fiber type                   |     | Multi-mode (MM)       |
| Transmitter type             |     | VCSEL                 |
| Transmitter wavelength       | nm  | 850                   |
| Transmitter output power     | dBm | -6 ... 1              |
| Optical receiving device     |     | InGaAs PIN photodiode |
| Receiver wavelength          | nm  | 850                   |
| Optical receiver sensitivity | dBm | -10.5                 |
| Receiver overload            | dBm | 0                     |
| Transmission distance        | m   | < 300                 |
| Operating temperature        | °F  | -40 ... 185           |