



# **A01585 SFP-TR10-T1270/R1330-ZR**

Ultra long reach BIDIR 10 gigabit Optical transceiver SFP+

## **User manual**

Rev. A

A large green circular graphic with a white circle in the center, located in the bottom right corner of the page.

Nevion  
Nordre Kullerød 1  
3241 Sandefjord  
Norway  
Tel: +47 33 48 99 99  
[nevision.com](http://nevision.com)

## Nevion Support

### Nevion Europe

P.O. Box 1020  
3204 Sandefjord, Norway  
Support phone 1: +47 33 48 99 97  
Support phone 2: +47 90 60 99 99

### Nevion USA

1600 Emerson Avenue  
Oxnard, CA 93033, USA  
Toll free North America: (866) 515-0811  
Outside North America: +1 (805) 247-8560

E-mail: [support@nevision.com](mailto:support@nevision.com)

See <http://www.nevision.com/support/> for service hours for customer support globally.

## Revision history

Current revision of this document is the uppermost in the table below.

| Rev. | Repl. | Date       | Sign | Change description |
|------|-------|------------|------|--------------------|
|      |       |            |      |                    |
|      |       |            |      |                    |
|      |       |            |      |                    |
|      |       |            |      |                    |
|      |       |            |      |                    |
|      |       |            |      |                    |
|      |       |            |      |                    |
|      |       |            |      |                    |
| A    | -     | 2017-06-02 | OEH  | Initial revision.  |

**Contents**

Revision history ..... 2

1 Product overview ..... 4

2 Specifications..... 5

General environmental requirements for Nevion equipment ..... 6

Product Warranty ..... 7

Appendix A Materials declaration and recycling information ..... 8

A.1 Materials declaration ..... 8

A.2 Recycling information ..... 8

## 1 Product overview

SFP-TR10-T1270/R1330-ZR is a 10 gigabit SFP+ transceiver that consist of an optical transmitter, an optical receiver and a two channel CWDM filter. They enable bi-directional 10Gbps traffic over one single-mode fiber with no extra equipment and are well suited for long haul applications. Connection to fiber is on a single LC connector. Typical use would have an SFP-TR10-T1270/R1330-ZR at one fiber end and an SFP-TR10-T1330/R1270-ZR at the other.

The SFP+'s have the ability to report information such as wavelength, signal presence, received signal level, launch power and internal temperature. This information is available in some of Nevion's SFP+ based products presented through their respective element management system.



SFP-TR10-C1xxx-ZR (for illustration)

## 2 Specifications

|                            |  |
|----------------------------|--|
| Power                      | < 1.5W   |
| Size                       | SFP+ compliant, dimensions defined by the SFP+ Multi-Sourcing Agreement (MSA). |
| Control                    | Multicon Gyda control and status   |
| Operating case temperature | 0 to +70 °C  |

### Supported standards

|               |                  |
|---------------|------------------|
| Ethernet      | 10GBASE-ZR/ZW    |
| Fiber Channel | 1200-SM-LL-L 10G |
| SONET         | OC-192           |
| SDH           | STM S-64         |
| ITU-T         | G.709            |

### Optical input

|                |                    |
|----------------|--------------------|
| Connector      | LC/UPC single mode |
| Wavelength     | 1330nm $\pm$ 10nm  |
| Optical budget | 21dB               |
| Sensitivity    | -20dBm             |
| Overload       | -6dBm              |

### Optical output

|                  |                    |
|------------------|--------------------|
| Connector        | LC/UPC single mode |
| Wavelength       | 1270nm $\pm$ 10nm  |
| Extinction ratio | min 3,5dB          |
| Power            | +1 to +6dBm        |

**General environmental requirements for Nevion equipment**

1. The equipment will meet the guaranteed performance specification under the following environmental conditions:
  - Operating room temperature range: 10°C to 40°C
  - Operating relative humidity range: <95% (non-condensing)
2. The equipment will operate without damage under the following environmental conditions:
  - Temperature range: -5°C to 50°C
  - Relative humidity range: <95% (non-condensing)

## **Product Warranty**

The warranty terms and conditions for the product(s) covered by this manual follow the General Sales Conditions by Nevion, which are available on the company web site:

[www.nevion.com](http://www.nevion.com)

## Appendix A Materials declaration and recycling information

### A.1 Materials declaration

For product sold into China after 1st March 2007, we comply with the “Administrative Measure on the Control of Pollution by Electronic Information Products”. In the first stage of this legislation, content of six hazardous materials has to be declared. The table below shows the required information.

| 組成名稱<br>Part Name   | Toxic or hazardous substances and elements |                   |                   |                                     |  |  |
|---|--|-------------------|-------------------|-------------------------------------|--|--|
|   | 鉛<br>Lead (Pb)                             | 汞<br>Mercury (Hg) | 鎘<br>Cadmium (Cd) | 六价铬<br>Hexavalent Chromium (Cr(VI)) | 多溴联苯<br>Polybrominated biphenyls (PBB) | 多溴二苯醚<br>Polybrominated diphenyl ethers (PBDE) |
| SFP-TR10-T1270/R1330-ZR   | ○  | ○                 | ○                 | ○                                   | ○                                      | ○  |
| O: Indicates that this toxic or hazardous substance contained in all of the homogeneous materials for this part is below the limit requirement in SJ/T11363-2006.               |  |                   |                   |                                     |  |  |
| X: Indicates that this toxic or hazardous substance contained in at least one of the homogeneous materials used for this part is above the limit requirement in SJ/T11363-2006. |  |                   |                   |                                     |  |  |

This is indicated by the product marking:



### A.2 Recycling information

Nevion provides assistance to customers and recyclers through our web site <http://www.nevion.com/>. Please contact Nevion's Customer Support for assistance with recycling if this site does not show the information you require.

Where it is not possible to return the product to Nevion or its agents for recycling, the following general information may be of assistance:

- Before attempting disassembly, ensure the product is completely disconnected from power and signal connections.
- All major parts are marked or labeled to show their material content.
- Depending on the date of manufacture, this product may contain lead in solder.
- Some circuit boards may contain battery-backed memory devices.