



SFP-TR10-D15xx.xx-ZR

Ultra extended reach DWDM 10 gigabit Optical transceiver
SFP+

User manual

Rev. A

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Revision history

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

Rev.	Repl.	Date	Sign	Change description
A	-	2014-10-16	AD	Initial revision.

Contents

Revision history 2

1 Product overview 4

2 Specifications 5

3 Available DWDM wavelengths 6

General environmental requirements for Nevion equipment 7

Product Warranty..... 8

Appendix A Materials declaration and recycling information 9

A.1 Materials declaration..... 9

A.2 Recycling information..... 9

1 Product overview

SFP-TR10-D15xx.xx-ZR is a 10 gigabit SFP+ transceiver that consist of an optical transmitter and an optical receiver. They are available with 40 DWDM wavelengths at 100MHz spacing enabling transport of 40 signals over one single-mode fiber and are well suited for mid/long haul applications.

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-D15xx.xx-ZR

2 Specifications

Power	< 2W, DWDM
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	1520nm to 1600nm
Optical budget	23dB
Sensitivity	-24dBm
Overload	-8dBm

Optical output

Connector	LC/UPC single mode
Center wavelength spacing	100 GHz (0.8nm)
Extinction ratio	min 9dB
Power	0 to +4dBm

3 Available DWDM wavelengths

Center Wavelength (nm)					
1530.33	1531.12	1531.90	1532.68	1533.47	1534.25
1535.04	1535.82	1536.61	1537.40	1538.19	1538.98
1539.77	1540.56	1541.35	1542.14	1542.94	1543.73
1544.53	1545.32	1546.12	1546.92	1547.72	1548.51
1549.32	1550.12	1550.92	1551.72	1552.52	1553.33
1554.13	1554.94	1555.75	1556.55	1557.36	1558.17
1558.98	1559.79	1560.61	1561.42		

General environmental requirements for Nevion equipment

1. The equipment will meet the guaranteed performance specification under the following environmental conditions:
 - Operating room temperature range: 0°C to 70°C
 - Operating relative humidity range: <95% (non-condensing)
2. The equipment will operate without damage under the following environmental conditions:
 - Temperature range: -20°C to 85°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

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 Part Name	Toxic or hazardous substances and elements					
	鉛 Lead (Pb)	汞 Mercury (Hg)	鎘 Cadmium (Cd)	六价铬 Hexavalent Chromium (Cr(VI))	多溴联苯 Polybrominated biphenyls (PBB)	多溴二苯醚 Polybrominated diphenyl ethers (PBDE)
SFP-TR10-D15xx.xx-ZR	O	O	O	O	O	O
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.