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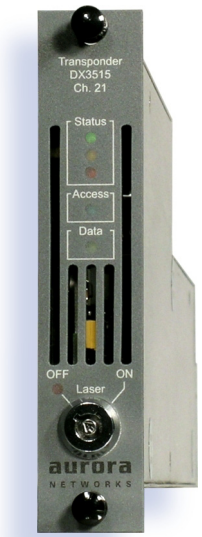
DX3515

Features

- Type 2R optical transponder
- Input wavelengths from 1270 nm to 1610 nm
- Output on 1550 nm DWDM ITU-grid
- Bit rates from 155 Mbps to 2.488 Gbps
- Protocol transparent, supporting:
  - Single and dual Gigabit Ethernet
  - Single and dual Fibre Channel
  - SONET OC-3, OC-12, and OC-48
  - SDH STM-1, STM-4, STM-12, and STM-16
- Front panel laser On/Off interlock switch
- Hot plug-in/out
- Local and remote status monitoring
- Occupies one full-depth slot

Digital Transponder (2.125 Gbps on DWDM ITU Grid)



The DX3515 Digital Transponder is a high bit rate capacity (maximum 2.488 Gbps) optical converter.

This device allows a non-wavelength specific (1270 to 1610 nm) optical transmission to be shifted to a wavelength on the standard DWDM ITU Grid (ITU-T G.694.1, with 100 GHz channel spacing).

This unit is a bit-rate and protocol transparent device that supports single and dual Fibre Channel, single and dual Gigabit Ethernet, Synchronous Optical Networking (SONET), and Synchronous Digital Hierarchy (SDH).

DX3515 Product Specifications

Physical:

- Dimensions:

  13.0” D x 4.3” H x 1.0” W (3RU)
  (33 cm x 11 cm x 2.5 cm)

- Weight:

  1.5 lbs (0.68 kg)

Environmental:

- Operating temperature range: –20º to +65ºC (–4º to 149ºF)
- Storage temperature range: –40º to +85ºC (–40º to 185ºF)
- Humidity: 5% to 95% non-condensing

General:

- Hot plug-in/out
- Transponder type: 2R (receive and retransmit)
- Transponder bit rate range: 155 to 2488 Mbps
- Output channel spacing: 100 GHz on DWDM ITU grid

Power Requirements:

- Input voltage: 12 V_{DC}
- Power consumption: 8 W

Optical Interface:

- Optical connector:

  SC/APC (connector at mid-plane mates to BP35M4x-1-00-AS or BP-A4)

Optical Input:

- Wavelength: 1270 nm–1610 nm
- Optical power input range:

  P_{IN} min: –15 dBm

  P_{IN} max: –3 dBm

- Input return loss: 30 dB

Optical Output:

- Wavelength: *See DWDM ITU Channel Plans description*.
- Wavelength stability: ±0.1 nm
- Output power: 5 dBm ±0.5 dBm
- Output level stability: ±0.2 dB
- Dispersion limit: 100 km (SMF-28)

DWDM ITU Channel Plans:

Aurora Networks supports DWDM network architectures with a variety of products on the standard DWDM ITU Grid (ITU-T G.694.1).

For more complete description of available DWDM ITU Grid channels and Aurora’s partitioning into convenient logical groups of 4, 8 and 16 channels in products for DWDM applications, please refer to the Aurora Networks DWDM ITU Grid Channel Plan data sheet.

When ordering DX3515 transponders on the ITU grid please note, for network planning purposes, that Aurora’s selection of AT3550 series broadcast transmitters operate at either 1545.3 nm ±0.9 nm (occupying the approximate region of ITU channels 39 through 41) or 1563.0 nm ±0.9 nm (occupying the approximate region of ITU channels 15 through 17).

Ordering Information

DX3515--1-1-AS**

- **Digital Transponder**
- **** = DWDM ITU Channel Number (16, 17, 18, . . . or 59)** ***(Reference Aurora Networks ITU Channel Plan Data Sheet)***
- **1 = Optical output interconnect to mid-plane connector; see Notes.**
- **1 = 100 km Dispersion Limit**
- **AS = SC/APC Connector**

Notes for Module Back Plates

DX3515-*xx*-1-1-AS series transponders may be connected to one of two different styles of chassis back plates, which must be ordered separately depending on the application. One style provides connections for a single transponder. This single-width back plate may be ordered as:

BP-A4

The second style provides connections for a group of four transponders installed in adjacent chassis slots. These 4-channel mux back plates (for which outputs can be cascaded from one back plate to another) may be ordered for the following channel groups: BP-35M4J (Ch 20-23), BP-35M4K (Ch 24-27), BP-35M4L (Ch 28-31), BP-35M4M (Ch 32-35), BP35-M4N (Ch 36-39), BP-35M4P (Ch 40-43), BP-35M4R (Ch 44-47), BP-35M4S (Ch 48-51), BP-35M4T (Ch 52-55) and BP-35M4U (Ch 56-59).

BP-35M4*-1-00-AS

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