Optiva OTP-1GETR 10/100/1000 Ethernet Network Management Connectivity

emcore®

The Optiva OTP-1GETR provides fiber transport connectivity for SNMP network management traffic on Optiva platforms between remote satellites and control rooms with one channel of 10/100/1000 Ethernet over fiber. Featuring a 4-port unmanaged Ethernet switch for multiple device connectivity, the OTP-1GETR supports short or long distances with single or dual fiber cable.

With an OTP-1GETR installed at each location on the Optiva platform, operators can locally and remotely monitor and control the entire Optiva platform with the Optiva EMCOREView Management & Control Suite.

The Ethernet compliant OTP-1GETR can also support data-centric applications such as fiber Ethernet transport for the LAN/WAN data network and data feeds in satellite control rooms.
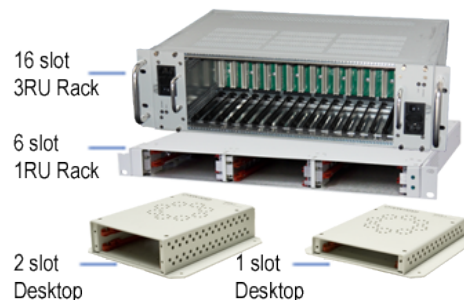
GENUINE
ORTEL TECHNOLOGY

Applications

- Network Management Connectivity for Antenna Remoting

- LAN/WAN Data Transport

- Short and Long Distance Ethernet

- Temporary Data Feeds

Features

- Single 10/100/1000 Ethernet Channel Over Fiber

- Supports 1310/1550 nm, CWDM & DWDM Optics

- Supports IEEE 802.3, 802.3u, 802.1p & 802.3ab Standards

- Compatible with All Optiva Rack-Mount and Portable Enclosures

- Remote Monitoring via SNMP and Optiva EMCOREView

- 3-Year Warranty

- RoHS Compliant

System Design

optiva|PLATFORM

The Optiva platform includes a wide range fiber optic transport products for satellite and microwave communications from 1 MHz to 40 GHz. These units can be used to construct transparent inter- and intra-facility links from 1 meter to >100 km for RF and microwave signal transport, antenna remoting, electronic warfare systems and other high-dynamic-range applications.

Optiva is a completely modular, hot-swappable platform. Both 19" rack-mount and compact tabletop, or wall-mountable enclosures are available. The 3 RU 19" rack-mount, fan-cooled enclosure Model OT-CC-16F can support up to 16 insert cards and utilize two dual-redundant, hot-swappable, 200 watt power supplies. The 1 RU 19" rack-mount, fan-cooled enclosure Model: OT-CC-6-1U can accommodate 6 insert cards and utilizes two hot-swappable 60 watt power supplies. Compact one-slot OT-DTCR-1, or two-slot OT-DTCR-2 enclosures are also available that use an external wall-mount power supply.

Enclosure Options

16 slot 3RU Rack
6 slot 1RU Rack
2 slot Desktop
1 slot Desktop

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Optical Specifications

Optical Code Options	Fiber	Wavelength (nm)	Min. Output Power (dBm)	Rx Sensitivity (dBm)	Optical Budget (dB)	Distance (km)	Connector Options
A2/A2	2	1310	-5.5	-12.5	7	10	LC
A3/A3	2	1550	-3.5	-20.5	17	40	LC
A2/A31	1	1310/1550	-5.5	-17.5	12	20	SC
A3/A21	1	1550/1310	-5.5	-17.5	12	20	SC
L4YY/L4YY2	2	1470 to 1610 (CWDM)	-2.8	-28	25	50 to 70	LC
MZZ/MZZ3	2	1559 to 1563 (DWDM C-Band)	0 (min) +4 (max)	-28 (min) -9 (max)	12 to 28	40 to 100	LC
NZZ/NZZ	2	1547 to 1560	+2	-31	33	120	LC

Note 1: Use "XX/XX" as is for ordering transmitter models but reverse for ordering receive models.
Note 2: When ordering CWDM optics replace "YY" with the desired channel number
Note 3: When ordering DWDM optics replace "ZZ" with the desired channel number

DWDM Optical Specifications

Optical Code Options "ZZ"	Wavelength (nm)
22	1559.79
23	1558.98
24	1558.17
25	1557.36
26	1556.55
27	1555.75
28	1554.94
29	1554.13
30	1553.33
31	1552.52
32	1551.72
33	1550.92
34	1550.12
35	1549.32
36	1548.51
37	1547.72

CWDM Optical Specifications

Optical Code Options "YY"	Wavelength (nm)
47	1471
49	1479
51	1511
53	1531
55	1551
57	1571
59	1591
61	1611

Ethernet

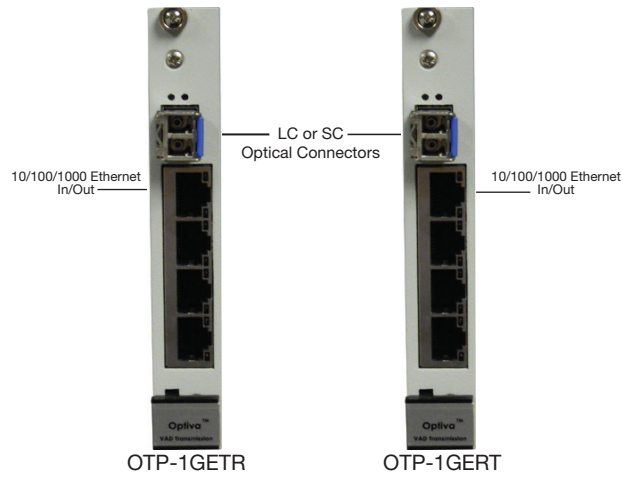| Specifications	Values
Standard	IEEE 802.3, 802.3u, 802.3ab, 802.3x, 802.1p, QoS (optional)
Data Rate	10/100 /1000 Mbps
Connector	RJ45
MAC Address Table	1 KByte
Packet Buffer Memory	1 MBit
Jumbo Frames	Up to 10 KBytes
Ports	4

General

Specifications	Values
Dimensions (Insert Card)	6.69"D x 0.81"W x 5.06"H 170.0 mm x 20.4 mm x 128.5 mm
Weight	11 oz / 311.8 g
Operating Temperature	-0˚C to +50˚C
Storage Temperature	-40˚C to +85˚C
Humidity	0 to 95% non-condensing
Operating Voltage	9-12 VDC
Power Consumption	6 Watts
Bit Error Rate	10-14
System Latency	< 1 ms
Warranty	3 Years

Monitoring & Control

Specifications	Values
Local	Front panel LED status and alert indicators
Remote	Optiva EMCOREView Management and Control Suite*

*Requires SNMP Controller Card (Model: OPV-CTLR-IC)

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Connection Diagram

OTP-1GETR   OTP-1GERT

Models

Transmitter	Receiver
OTP-1GETR-XX-LC	OTP-1GETR-XX-LC
OTP-1GETR-A2/A3-SC	OTP-1GETR-A3/A2-SC
OTP-1GETR-L4YY/YY-LC	OTP-1GETR-L4YY/YY-LC
OTP-1GETR-ZZ/ZZ-LC	OTP-1GERT-ZZ/ZZ-LC

- When ordering replace "XX" or "XX/XX" with one of the Optical Codes
- When ordering CWDM, replace "YY" in the Optical Code L4YY
- When ordering DWDM, replace "ZZ" in the Optical Code LMZZ
- Chromatic dispersion as well as other losses should also be taken into account
- Stated distances are the maximum range, shorter distanc may require attentuation
- Standard connection type is UPC