



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 85/1310/1550 nm, CWDM/DWDM Optics
- Singlemode Options (Up to 100 km)
- Multimode Options (Up to 2 km)
- Supports Ethernet QoS (Optional)
- 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

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.

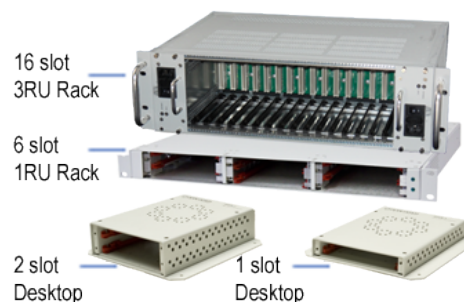
System Design

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, video transport, electronic warfare systems and other high-dynamic-range applications.

optiva PLATFORM

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 enclosures (Model OT-CC-16 and OT-CC-16F) can support up to 16 insert cards and utilize two dual-redundant, hot-swappable, 100 or 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



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



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Optical Specifications

Optical Code Options "XX/XX or YY/YY"	Fiber Type/ Number	Wavelength (nm)	Min. Output Power (dBm)	Rx Sensitivity (dBm)	Optical Budget (dB)	Distance (km)	Connector Options
A0/A0	MM/2	850	-10	-17	7	0.5	LC
A1/A1	MM/2	1310	-5.5	-10.5	5	2	LC
A2/A2	SM/2	1310	-5.5	-12.5	7	10	LC
A2D/A2D	SM/2	1310	-5.5	-17.5	12	20	LC
A3/A3	SM/2	1550	-3.5	-20.5	17	40	LC
A3D/A3D	SM/2	1550	0	-25	25	60	LC
L4x1/L4x1	SM/2	1270 to 1610 (CWDM)	-2.8	-28	25	50 to 70	LC
A2/A3*	SM/1	1310/1550	-5.5	-17.5	12	20	SC
A3/A2*	SM/1	1550/1310	-5.5	-17.5	12	20	SC
MY/YY^	SM/2	1528 to 1563 (DWDM C-Band)	0	-28	28	100	LC

*Use "XX/XX" as is for ordering transmitter models but reverse for ordering receive models.

^When ordering DWDM optics replace "YY" with the desired channel number from the DWDM Optical Specifications Grid.

DWDM Optical Specifications

Optical Code Options "YY"	Frequency	Wavelength (nm)
17	191.7	1563.86
18	191.8	1563.05
19	191.9	1562.23
20	192.0	1561.42
21	192.1	1560.61
22	192.2	1559.79
23	192.3	1558.98
24	192.4	1558.17
25	192.5	1557.36
26	192.6	1556.55
27	192.7	1555.75
28	192.8	1554.94
29	192.9	1554.13
30	193.0	1553.33
31	193.1	1552.52
32	193.2	1551.72
33	193.3	1550.92
34	193.4	1550.12
35	193.5	1549.32
36	193.6	1548.51
37	193.7	1547.72
38	193.8	1546.92

Optical Code Options "YY"	Frequency	Wavelength (nm)
39	193.9	1546.12
40	194.0	1545.32
41	194.1	1544.53
42	194.2	1543.73
43	194.3	1542.94
44	194.4	1542.14
45	194.5	1541.35
46	194.6	1540.56
47	194.7	1539.77
48	194.8	1538.98
49	194.9	1538.19
50	195.0	1537.40
51	195.1	1536.61
52	195.2	1535.82
53	195.3	1535.04
54	195.4	1534.25
55	195.5	1533.47
56	195.6	1532.68
57	195.7	1531.90
58	195.8	1531.12
59	195.9	1530.33
60	196.0	1529.55

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)

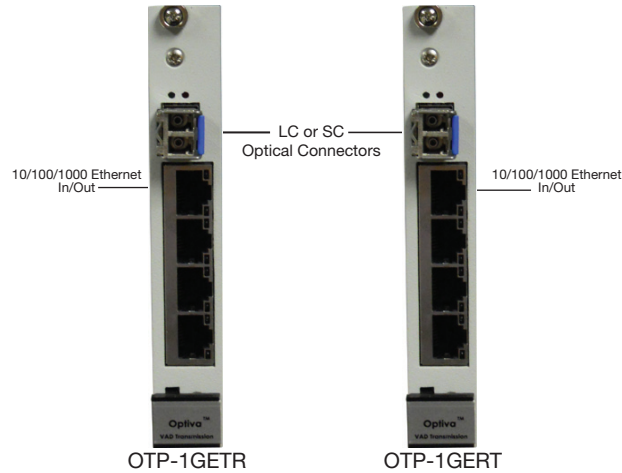
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Connection Diagram



Models

Transmitter
OTP-1GETR-XX-LC
OTP-1GETR-L4x1-LC
OTP-1GETR-NOC

Transmitter	Receiver
OTP-1GETR-XX/XX-SC	OTP-1GERT-XX/XX-SC

- When ordering replace "XX" or "XX/XX" with one of the Optical Codes
- When ordering CWDM, replace "x" in the Optical Code L4x1 with A (1270nm), B (1290 nm), C (1310 nm), D (1330 nm), E (1350 nm), F (1370 nm), G (1390 nm), H (1410 nm), I (1430 nm), J (1450 nm), K (1470 nm), L (1490 nm), M (1510 nm), N (1530 nm), O (1550 nm), P (1570 nm), Q (1590 nm) or R (1610 nm).
- NOC: non-optical card
- Chromatic dispersion as well as other losses should also be taken into account
- Stated distances are the maximum range, shorter distanc may require attenuation
- Standard connection type is UPC

