

# WaveReady™ Communication and Management Module with Built-in OSC

## COM-300



### Benefits

- Includes two integrated OSC interfaces to reduce network management costs
- Extends local Ethernet interfaces over the OSC to simplify network management
- Supports complex network topologies through RSTP
- Supports extended OSC link budget without amplification

The WaveReady Communications Module 300 (COM-300) is a new generation of WaveReady Node Controller that provides enhanced monitoring, communication, configuration, and management of WaveReady modules when mounted in a WaveReady 3000-series platform.

The COM-300 is used to manage nodes; retrieve shelf inventory; configure equipment; and report alarms, logs, and performance data. It is also used to upgrade software on local and remote nodes. The COM-300 can be hot-swapped without impacting services on other WaveReady modules.

The COM-300 features three Ethernet ports, one USB Mini-type AB craft port, and two fast Ethernet optical supervisory channel (OSC) ports.

The USB craft port provides a direct connection for initial configuration of the COM-300 and local management of other modules.

The two small form factor pluggable (SFP) interfaces allow for direct connection to remote nodes using an Ethernet-based OSC. The OSC SFPs support extended reach SFPs that do not require amplification.

The Ethernet interfaces provide for local or remote management of the COM-300 and other modules in the shelf. The Ethernet interface also allows COM-300 modules to be linked in series for easy management of modules in multiple shelves. WaveReady transponders capable of providing an embedded management channel over the optical fiber will also allow the COM-300 to manage modules in a remote shelf.

In addition, the COM-300 provides secured management access, local and remote performance monitoring on OSC signals and Ethernet ports, and rapid spanning tree protocol (RSTP) capability.

The COM-300 supports four management interfaces: the WaveReady Node Manager and the WaveReady Multi-Node Manager, which provide a convenient graphical user interface (GUI), a TL1 command-line interface, and an SNMP command-line interface.

Light-emitting diodes (LEDs) on the front panel indicate the card status and alarm conditions of the COM-300 module and other modules in the same shelf. LEDs associated with the Ethernet and OSC ports indicate link activity.

### Key Features

- Provides three Ethernet management ports and one USB craft interface
- Supports RSTP
- Supports two pluggable SFP

### Applications

- Enables cost-effective Metro and Regional DWDM networks
- Simplifies optical network management using Ethernet-based OSC

### Compliance

- CC Part 15 (Class A); UL 60950 3rd Edition, December 2000; CAN/CSA-C22.2 No. 950-95; NEBS Level 3; GR-63-CORE; GR-1089-CORE; GR-78-CORE; CE; IEC 60950; ETS300-386; EN 55022 (Class B); 73/23/EEC
- RoHS (exemptions 7b, 8a)
- IPv4 and IPv6 standards

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Performance Specifications<sup>1</sup>

Parameter	Minimum	Typical	Maximum
<b>Electrical Characteristics</b>			
DC supply voltage <sup>2</sup>		–48 V through WaveReady 3000-Series shelf	
Power dissipation		18.5 W	20 W
<b>Physical Dimensions</b>			
Size (H x W x L)		17.27 x 2.54 x 21.84 cm (6.8 x 1.0 x 8.6 in)	
Weight (approximate)		0.54 kg (1.2 lb)	
Mounting options	Mounts in a WaveReady 3000-Series shelf in a standard 19- or 23-inch telecommunications rack		
<b>Environmental Characteristics</b>			
Operating ambient temperature	5°C	—	40°C
Storage temperature	–40°C	—	85°C
Relative humidity (non-condensing)	5%	—	85%
<b>Interface</b>			
USB Mini type AB	Craft interface.		
RJ45 or 10/100BaseT Ethernet	Two auto-sense, auto-crossover Ethernet ports (ports A and B) for networking and daisy-chaining. One local craft access (LCA) Ethernet port for local management and provisioning. Supports IPv4 and IPv6.		
Front panel LEDs, buttons and ports	6 Status LEDs: Card (power), Major (Major Alarm), Minor (Minor Alarm), ACO (Alarm Cut-Off), OSC Port 1, OSC Port 2. The three Ethernet ports also have two status indicator LEDs each. One push button: ACO (Alarm Cut-Off) / Refresh (shelf inventory refresh)		
Alarm relay signals	Dry contact, critical, major, and minor alarms. Relay is open under normal operation. Relay is closed when power is off or an alarm is active.		
OSC	100BaseFX optical interfaces for OSC via SFPs		
<b>Backplane Connector</b>			
Electrical	A single 96-pin connector mounted on the backplane. Compatible with WaveReady 3500F and 3500F-HP shelves.		
<b>Software and Management</b>			
TL1 command mode	Standard TL1 syntax, Telcordia® GR-811-CORE compliant. Supported through the USB craft interface or Ethernet ports.		
SNMP Management	SNMPv2c supported through local Ethernet ports or OSC ports. Compatible with third-party management software, such as HP OpenView, Netcool, Telenium, and many others.		
WaveReady Node Manager and Multi-Node Manager	Linux and Windows (XP, Vista, Windows 7) compatible GUIs that can perform nodal or network-level faults, alarms, configuration, node administration, and performance management through the USB craft interface or the Ethernet and OSC ports. Remote management of WaveReady nodes is available through an embedded management channel or an optical supervisor channel. Communication with remote modules through an embedded supervisory channel is available for some modules.		

1. Deploy product in accordance with each company's deployment directives.

2. The DC power supply must be –48 V SELV output and certified by a nationally recognized test laboratory (NRTL). UL tested at –48 V.

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**Ordering Information**

For more information on this or other products and their availability, please contact your local JDSU account manager or JDSU directly at 1-800-498-JDSU (5378) in North America and +800-5378-JDSU worldwide or via e-mail at [customer.service@jdsu.com](mailto:customer.service@jdsu.com).

<b>Product Code</b>	<b>Description</b>
COM300ET003Y-4.8	Communication Module 300 (COM-300) with WaveReady system release 4.8 and one Node Manager license
COM300ET003Y-5.0	Communication Module 300 (COM-300) with WaveReady system release 5.0 and one Node Manager license
COM300ET003Y-5.1	Communication Module 300 (COM-300) with WaveReady system release 5.1 and one Node Manager license
COM300ET003YM4.8	Communication Module 300 (COM-300) with WaveReady system release 4.8 and one Multi-Node Manager license
COM300ET003YM5.0	Communication Module 300 (COM-300) with WaveReady system release 5.0 and one Multi-Node Manager license
COM300ET003YM5.1	Communication Module 300 (COM-300) with WaveReady system release 5.1 and one Multi-Node Manager license

**Associated Parts: SFPs for OSC**

WRT-SFPL3C03SC510	SFP transceiver, 125 Mbps with DDM, CWDM, 1511 nm
WRT-SFPL3T24SC-0xx	SFP transceiver, 125 Mbps with DDM, DWDM, 120 km (where "xx" is an ITU channel number 20 to 23, 25 to 28, 30 or 31)

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