

# OSIRIS OC-3 and OC-3c Mapper Units

## Overview



The Positron OSIRIS Multi-service Platform (MSP) is an integrated access solution for the rapidly expanding synchronous optical network (SONET) broadband markets. It delivers the most cost-effective, compact and simple-to-deploy solution for multi-service traffic such as data, voice and video.

## OC-3 and OC-3c Mappers Technology

The OSIRIS solutions are designed to map various types of signals over a fiber ring. The OC-3 mapper provides access to up to three STS-1 signals (51.84 Mbps) onto a SONET ring, while keeping complete VT1.5 visibility. It can also be used to access one STS-3c signal (155.52 Mbps). The OC-3 mapper is available with IR-1, LR-1 or LR-2 interface with the choice of FC, SC or ST connectors.

The OC-3c mapper provides access to one STS-3c signal (155.52 Mbps) onto a SONET fiber ring. The OC-3c mapper is available with a multimode interface with an SC connector, or with a single mode, intermediate reach (IR-1) interface with an ST connector.

## Key Benefits

- Capability to carry asynchronous transfer mode (ATM) traffic onto SONET
- Protected traffic from an add/drop multiplexer (ADM) to other equipment
- Remote circuit testing and loopback
- Capability to subtend rings (OC-3 only)

## Key Features

- Efficient mapping of STS-3c signals
- Support for automatic protection switching (APS) 1+1
- Failure detection
- VT1.5 alarm reporting and switching (OC-3 only)

## Technical Specifications

Product Code	800503	800553	800563	800504	800505
Laser type	IR-1	LR-1	LR-2	Multi-mode	LR-1
<b>Receiver</b> Connector faceplate Detector	SC, ST, FC InGaAs PIN	SC, ST, FC InGaAs PIN	SC, ST, FC InGaAs PIN	Duplex SC InGaAs PIN	ST InGaAs PIN
<b>Input Power (average)</b> Maximum Minimum	-8 dBm -34 dBm	-8 dBm -34 dBm	-8 dBm -34 dBm	-14 dBm -30 dBm	-8 dBm -28 dBm
<b>Transmitter</b> Connector faceplate Optical source	SC, ST, FC InGaAs laser (MLM)	SC, ST, FC InGaAs laser (SLM)	SC, ST, FC InGaAs laser (SLM)	Duplex SC InGaAs LED	ST InGaAs laser (MLM)
<b>Output Power (average)</b> Maximum Minimum Wavelength center Wavelength range	-8 dBm -15 dBm 1310 nm 1261–1360 nm	0 dBm -5 dBm 1310 nm 1280–1335 nm	0 dBm -5 dBm 1550 nm 1480–1580 nm	-14 dBm -19 dBm N/A 1270–1380 nm	-8 dBm -15 dBm 1310 nm 1261–1360 nm
<b>Transmitter and Receiver</b> Optical link budget Target distance	18 dB 32 Km	28 dB 50 Km	28 dB 100 Km	11 dB 2 Km	13 dB 25 Km

### Physical

	Mapper Slot(s)
OSIRIS STD Shelf*	Even slots, 1–9
OSIRIS XTD Shelf*	Odd slots, 1–23
OSIRIS XTS Shelf	1–13
OSIRIS Micro DS-1 Shelf	1,2
OSIRIS Micro Wallmount Unit (WMU) DS-1	1,2
OSIRIS Micro DS-3 Shelf	1,2
OSIRIS Micro WMU DS-3	1,2

### General

<b>LEDs</b>	1 for card status (initializing, normal, alarm or failure)
<b>Power Consumption (maximum)</b> Per OC-3 IR-1 Per OC-3 LR-1 Per OC-3 LR-2 Per OC-3c multi-mode Per OC-3c single mode, IR-1	12.05 watts 12.05 watts 12.05 watts 4.8 watts 4.8 watts
<b>Compliance</b> Safety	EN60950; UL 1950, 3rd Edition; CSA C22.2, No. 950

\* The mappers can be installed in all OSIRIS STD and OSIRIS XTD shelf slots. However, it is recommended that you install them in even slots in the OSIRIS STD and odd slots in the OSIRIS XTD, as only those slots have openings for patch cords and cables.

Product Code	CPR	ECI/Bar Code	CLEI Code	Description	Shelves
800503 FC	G73015	296775	SN03JBCHAA	OC-3 tributary card IR-1 FC	All
800503 SC	G73015	296776	SN03JBAHAA	OC-3 tributary card IR-1 SC	All
800503 ST	G73015	296777	SN03JBDHAA	OC-3 tributary card IR-1 ST	All
800553 FC	G73016	296778	SN03JTCHAA	OC-3 tributary card LR-1 FC	All
800553 SC	G73016	296779	SN03JTAHAA	OC-3 tributary card LR-1 SC	All
800553 ST	G73016	296780	SN03JDHAA	OC-3 tributary card LR-1 ST	All
800563 FC	G73017	296781	SN03JUCHAA	OC-3 tributary card LR-2 FC	All
800563 SC	G73017	296782	SN03JUAHAA	OC-3 tributary card LR-2 SC	All
800563 ST	G73017	296783	SN03JUDHAA	OC-3 tributary card LR-2 ST	All
800504	D72229	229070	SNC8HROBAA	OC-3c tributary, multi-mode, duplex SC	All
800505	E72249	231404	SNC8HTOBAA	OC-3c tributary, single mode, IR-1, ST	All

## Ordering Information

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