

# OSIRIS XTS Shelf

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## 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 multiservice traffic such as data, voice and video.



The OSIRIS XTS is a high-speed OC-3/OC-12/OC-48 add/drop multiplexer (ADM) shelf that allows access to up to 12 STS-1 of bandwidth. This 18" wide shelf is mountable in a 23" rack on a wall or in a cabinet.

Alarm and craft interfaces, as well as power and traffic-carrying signals, are located on both the left and right sides of the shelf, providing convenient access. The OSIRIS XTS Shelf is ideal for OC-12 or OC-48 rings with medium-fill SONET access application.

## Key Benefits

- Flexibility in choice of line rate and bandwidth usage/segmentation
- Easy and flexible installation and maintenance
- Low risk of power loss
- Optimal use of equipment
- 1:N protection
- No fans necessary; better mean time between failure (MTBF)

## OSIRIS XTS Technology

The OSIRIS XTS Shelf comes with a pre-installed alarm and craft interface unit (ACIU) in the leftmost slot and a tributary interface unit (TIU) in the rightmost slot. Both of these cards can be ordered separately as replacements.

The ACIU includes front alarm LEDs for critical, major, minor, remote, power, active, fuse A and fuse B (power source) alarms. The ACIU also provides the interface to the system's operations, administration, maintenance and provisioning (OAM&P).

The OAM&P interface provides a user input/output (I/O) port, an operating system (OS) port, a network element (NE) LAN port, a craft port, and an alarms port. In addition, there are DC power inputs, as well as DS-3/EC-1 BNC data connectors.

The TIU acts as the main data interface for the shelf, including DS-1, DS-3/EC-1 and external primary and secondary clock connections. It also has an emergency power input connection, which supplies temporary power for maintenance.

### Key Features

- Up to 12 STS-1 of bandwidth access
- Support for OC-3/OC-12/OC-48
- Slots for up to 13 mappers
- Convenient side access to most connections
- Up to two separate power inputs
- Emergency power feed input
- Mixed mapper schemes
- Mapper protection slots
- Convection-cooled design
- Various mounting configurations

## Technical Specifications

Plug-in Mapper Units	Mapper Slots	Protection Slots
DS-1	6–12	13
DS-3	1–3, 5–7	4, 8
EC-1	1–3, 5–7	4, 8
Ethernet	1–13; with cover on: 1–12	—
Fast Ethernet	1–13; with cover on: 1–12	—
OC-3/OC-3c	1–13	—
Multi-service Ethernet (MSE)	1–13	—

Additional Plug-in Units	Slots	Description
Auxiliary Card (AUX2)	AUX	Monitoring and control of other user devices
Network monitor and control unit (NMCU)	MCU	Processing unit, OAM&P
Buffer Interface Unit (BIU)	BIU-A, BIU-B	Signal amplifying
Optical Access Unit (OAU)	OAU-A, OAU-B	Multiplexing and demultiplexing for SONET, electrical-to-optical conversion
Protection Switching Control Unit (PSCU)	PSCU	Switching between failed and backup DS-1 mappers

Physical	
Dimensions	H: 8.75" (22.23 cm) or 5 mounting spaces (mtg sp); W: 18" (45.72 cm); D (without shelf door): 10" (25.4 cm); D (with shelf door): 10.5" (25.57 cm)
Required space for separation from other equipment	2 mtg sp
Weight	34 lbs (15.4 kg), maximum

Environmental (Guaranteed)	
Humidity	5% to 95%, non-condensing
<b>Operating temperature</b>	
General	-40° F to +149° F (-40° C to +65° C)
With OC-12/OC-48 OAUs and/or VPR, Ethernet and Fast Ethernet	32° F to 122° F (0° C to 50° C)
Storage Temperature	-40° F to +185° F (-40° C to +85° C)

<b>Compliance</b>	
Safety	EN60950; UL 1950; CSA C22.2, No. 950
Technical Compliance Requirements	Telcordia GR-253; ITU-T G.707, G.708, G.709, G.957, G.958

<b>Power</b>	
Distribution	Point-of-use power supply (PUPS)
Fuses	60 VDC GMT 7.5 amp
Grounding	Dedicated ground cables
Input Redundancy	VA and VB power cable feeds and emergency power input on TIU
Isolation	Signal, logic, frame, and battery return
Operating Voltage	-20 Vdc to -60 Vdc (-40 Vdc to -60 Vdc for OC-48 and VPR)

<b>Power Consumption</b>	
ACIU	2 watts
Fully loaded OC-3	114 watts
Fully loaded OC-12	124 watts
Fully loaded OC-48	152 watts
TIU	0.5 watts

<b>Product Code</b>	<b>CPR</b>	<b>ECI/Bar Code</b>	<b>CLEI Code</b>	<b>Description</b>
800130/6	139786	433191	SNMJAA0ARA	OSIRIS XTS Shelf and mounting brackets
800364/6	H70967	222241	SNCIROVEAA	Spare ACIU
800361/6	F70235	2400588	SNCPLPW3AB	Spare TIU

## Ordering Information

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