

Metro-Optical Transport Access

OnSite Series Model OS1063



The Patton Model OS1063 delivers flexible and modular multiservice solutions for 2G/3G backhaul, fixed-line networks, and private and utility networks.

Ultra-compact design (1 RU)

STM-1 trunks, built-in E1/T1 client ports, and integrated non-blocking cross-connect

Highly flexible configurations

Terminal mux and ADM, linear MSP 1+1 protection, point-to-point, linear ADM, ring ADM, and SNCP/I and SNCP/N

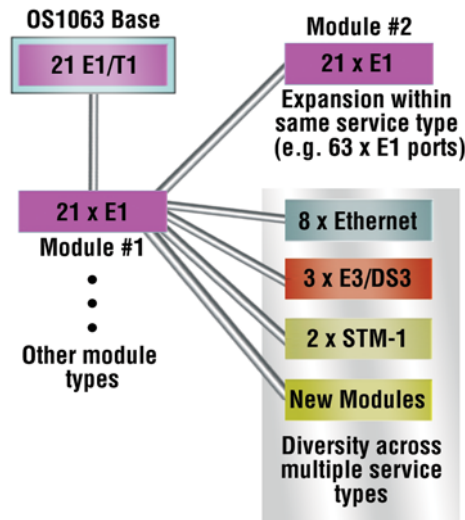
Next-generation SDH features

GFP encapsulation, virtual concatenation (VCAT), LO/HO, LCAS

Layer 2 packet intelligence

Ethernet MAC with flow control, VLAN, rate limiting, Q-in-Q, and QoS

Example combinations of service and port capacity expansions



The Patton OnSite Series Model OS1063 is an ultra-compact next-generation flex access node. The OS1063 is the platform of choice for economical deployment of access points with an initial count of 21 E1 ports, but with flexibility for future capacity expansion and simple migration toward converged IP service networks. The OS1063 supports 3G/4G mobile network backhaul, secure and scalable carrier Ethernet transport, multi-service aggregation, quad-play connectivity (voice, data, video and mobility), and technology mediation among TDM, ATM, and Ethernet.

The advanced modular design of the OnSite OS1063 provides unequalled flexibility in its class in terms of service offerings, capacity and functional upgrades.

The OS1063 incorporates next-generation SDH features such as virtual concatenation (VCAT), link capacity adjustment

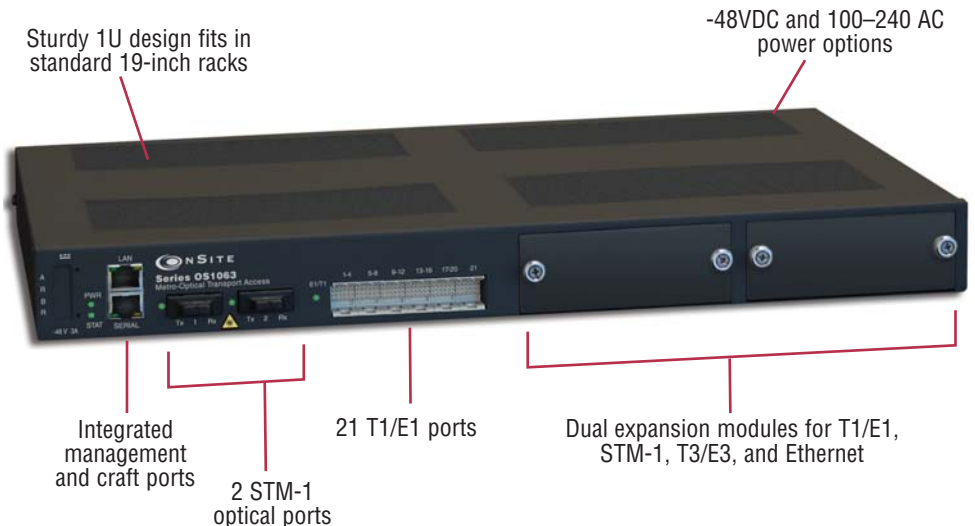
scheme (LCAS) and generic framing procedure (GFP) for efficient packet data transport. The platform also incorporates Layer 2 features such as VLAN tagging, rate limiting and statistical multiplexing with multi-level QoS control.

The base OS1063 system is configured with 2 STM-1 and 21 E1/T1.

Two expansion module slots are included for increasing system capacity beyond the initial base configuration. Additional ports and features only require simple insertion of one of the many available types of TDM and packet data modules.

In only one RU, the OS1063 supports expansion up to 63 E1 ports and 18 Ethernet 10/100 ports

Visit www.patton.com for more information.



Typical Application

The advanced modular design of the Patton OnSite OS1063 provides unequalled flexibility in its class in terms of service offerings, capacity and functional upgrades.

The base OS1063 system is configured with:

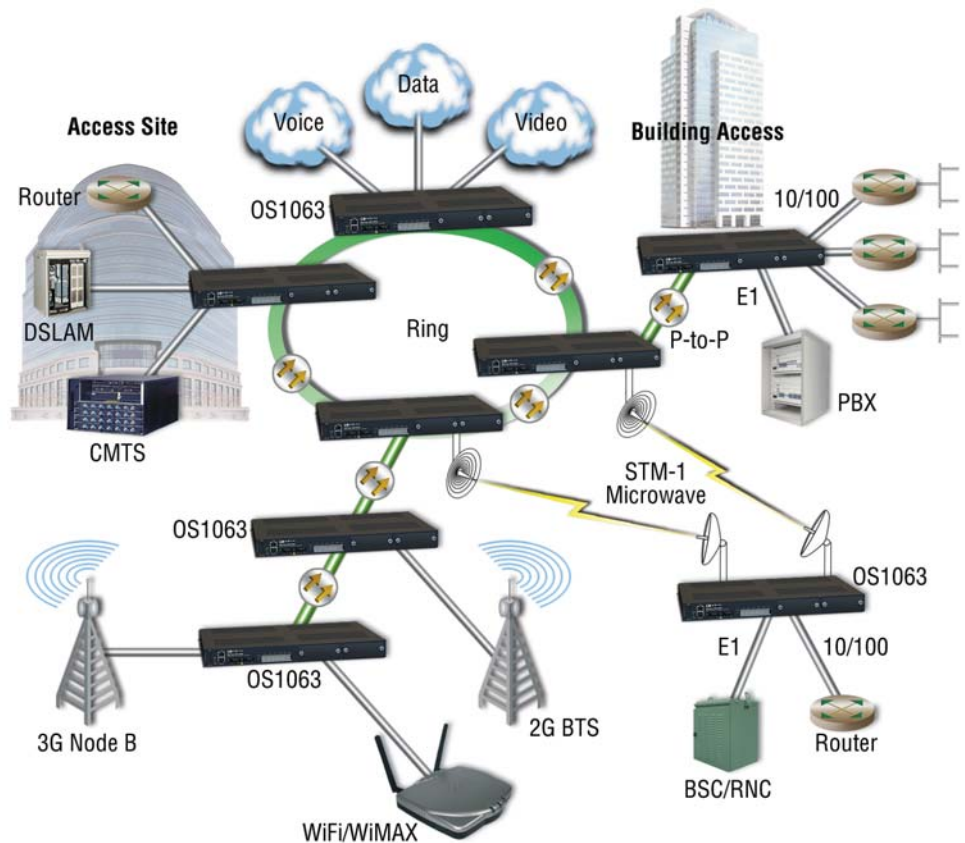
- 2 STM-1
- 21 E1/T1

Two expansion module slots allow increasing system capacity beyond the initial base configuration. Additional ports and features only require simple insertion of one of the many available types of TDM and packet data modules.

In only one RU, the OS1063 supports expansion up to:

- 63 E1 ports
- 16 Ethernet 10/100 ports

The OS1063 incorporates next-generation SDH features such as virtual concatenation (VCAT), link capacity adjustment scheme (LCAS) and generic framing procedure (GFP) for efficient packet data transport. The platform also incorporates Layer 2 features such as VLAN tagging, rate limiting and statistical multiplexing with multi-level QoS control. The OS1063 is easily configured and managed through a simple Web-based GUI interface or the scalable Patton OnSight NMS.



Specifications*

Trunk Interfaces

STM-1: G.707, G.783 • Optics: G.957 S-1.1, L-1.1 and L-1.2 options

Client Interfaces

E1: G.703, 75-ohm and 120-ohm options • T1: G.703, 100-ohm • Ethernet 10/100Base-TX: 802.3u

Expansion Modules

SDH: STM-1 optical (2 ports) • STM-1 electrical (2 ports)

PDH: E1 (21 ports) • E3/DS3 (3 ports)

Packet Data: 10/100Base-TX (8 ports)

Configuration & Port Capacity for 2 Expansion Slots

STM-1: Base: 2 • Max: 6

E1: Base: 21 • Max: 63

E3/DS3: Base: – • Max: 6

10/100Base-TX: Base: – • Max: 18

Protection

Linear MSP 1+1 • SNCP/I and SNCP/N

Bandwidth Connectivity and Provisioning

Connectivity: VC-12, VC-3 levels • One-way, two-way, drop-and-continue and multicast connections • VCAT: VC-12-Xv and VC-3-Xv • LCAS: G.7042 • Packet encapsulation: GFP-F (G.7041)

Timing & Synchronization

Internal: Stratum 3 clock • Line timing: STM-1 and E1/T1 • External timing: Dual Sync In/Out ports at 2 or 1.5 Mbps/MHz • SSM support: G.781

System Access

Serial RS-232 and Ethernet LAN management ports • IP over DCCr and DCCm options • IP over E1 signal mapped into selected VC-12 channel • DCC transparency (any subset of DCC rows) • Telnet

Operations

Local and remote software download and upgrade (FTP/TFTP) • Loopbacks: facility and terminal • ALS (automatic laser shutdown): G.958 • Alarm

Contacts (optional) • Orderwire: 2-wire interface using E1 or E2 byte (optional)

Management

Web-based GUI management interface • XML • SNMP v1/v2

Packet Intelligence

Ethernet MAC: 802.3 • VLAN: 802.1Q and Q-in-Q • Service provider VLAN (SP-VLAN) using S-Tag: 802.1ad • Tagging operations: C-Tag and S-Tag add/strip • Flow Control: 802.3x • Rate Limiting: Sustained and peak rates with 64 kbit/s granularity for ports and VLANs • QoS: 4 levels with strict priority, WFQ and WRED support

Dimensions

1.75H x 17.25W x 11.54D in.
(44.45H x 438.2W x 293D mm)
1RU

Weight

11 lbs (5 kg)

Cooling

Natural convection cooling (no fans)

Mounting

19-inch EIA/TIA or ETSI 300 mm racks, or desktop and wall-mounting options

Power

AC input: 100 to 245 V at 50 to 60 Hz

DC input: -36 to -72 V (-48V nominal), dual inputs

Consumption: 60 W maximum

Environment

Temperature: 0 to +50 C (+32 to +122 F)

Humidity: 5 to 95%, non-condensing

EMC

EN 55022 Class A, FCC part 15 Class A

Safety

EN 60950, UL 60950

CE Mark

* Specifications subject to change without notice.

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