



SparkLight ADM-16 a compact, high-density STM-1/4/16 nextgeneration access multiplexer, that helps to support high-speed communications services.

Providing a wide variety of interfaces, on one common platform, allows the service provider to build effective, flexible, user-friendly communications network.

Extremely powerful EoS tools enable a smooth migration from TDM to packet services. Using VCAT to provide flexible bandwidth assignment from 2Mbps to 1000Mbps, and LCAS for reliable bandwidth efficient transport of many different packet services.

## SPARKLight

optical transmission system

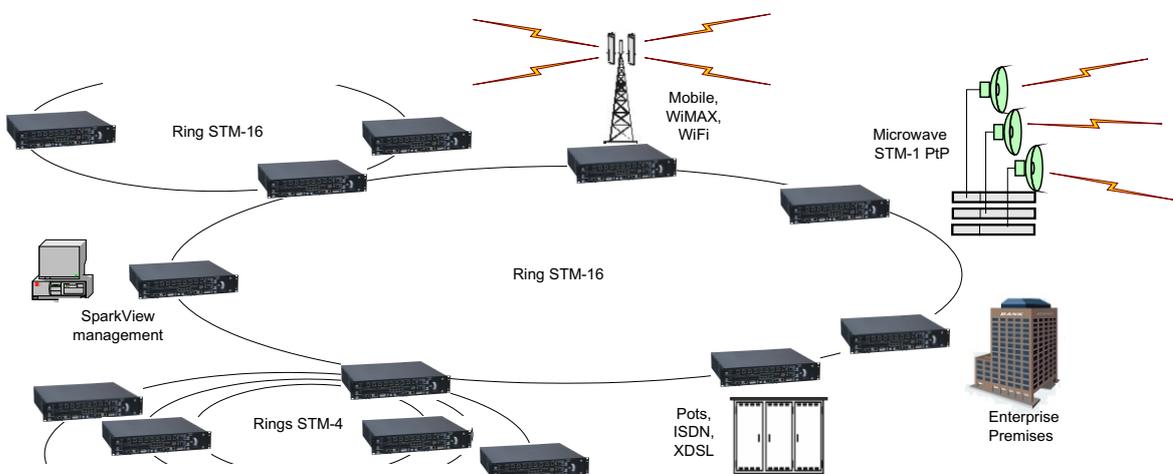


### Benefits:

- Provides revenue-generating next generation Ethernet services while preserving investments in legacy SDH networks
- Optimized bandwidth utilization for Ethernet services using GFP, VCAT, LCAS functionality
- Effective management integration using Java Web Start GUI and SNMP protocol transported by an embedded IP/OSPF telemanagement network
- Compact solutions improves place and energy efficiency that can help lower operating expenses
- Easy migration from TDM to IP
- Low OPEX/CAPEX

### Applications:

- Backbone networks
- Backhaul network for wireless and wire-line operators
- Access networks for Enterprises
- Multi-service network for energy, traffic, utilities operators



# SparkLight ADM-16

NG SDH multi-service STM-1/4/16 cross-connect & multiplexer

## Features:

- 2 and 6 slot »high Availability« shelf with power supply redundancy
- HW redundancy for all modules
- Non blocking 17.5G@VC-4 and 3.7G@VC-12 cross-connect
- Up to 4 STM16/4 SFP based optical interfaces
- Up to 4 STM4/1 SFP based optical (in case of STM1 also electrical) interfaces
- WDM and EDFA modules are supported
- Supported many different SDH protection mechanisms
- Up to 8 10/100 Eth interfaces per central module
- Up to 2 Gbit Eth interfaces
- GFP-F Mapping
- VCAT and LCAS protocol support
- Enhanced L2 Aggregation support
- Up to 252 E1 interfaces in 6 slot chassis (max 63 E1 interfaces on special multiport E1 blade)
- Java Web Start and SNMP based integrated management

Technical data		
<b>Architecture</b>	Shelves	ATS2DC: 2 slots, ATS6DC: 6 slots
	Central blade	STM16CC: STM-16/4/1 cross-connect blade
	Tributary blades	TB32E1: 32xE1 interfaces on front side, RTM31E1: 31xE1 interfaces on rear side
	Other blades	OAB: optical amplifier blade, MBWDM: xWDM multiplexer blade
	NE types	NG SDH terminal, NG SDH add/drop multiplexer, NG SDH cross-connect
<b>Aggregate Interfaces</b>	HW redundancy	Central Blade, Tributary Blades, Power Module
	STM-16/4	4 interfaces on STM-16 blade
	STM-4/1	4 interfaces on STM-16 blade
	Compatibility	SFF-8472, SFF-8074i MSA Digital Diagnostics Monitor compliant SFP Transceiver MSA Spec.
	Suitable SFP modules	ITU-T G.957 Optical STM-1/4 up to 150 km, STM-16 up to 120km Electrical STM-1
<b>Tributary interfaces</b>	EDFA optical booster	up to +20 dBm for up to 200 km
	E1	Up to 252xE1 ports (63xE1 per slot) G.703 point 6., 2.048 kbit/s 120 Ω
	Ethernet interfaces	2x1000 Base-SX/LX/CX SFP module (optional electrical RJ45 SFP) 8x10/100 Base T, RJ45
<b>SDH Features</b>	Cross-connect	Capacity: 17,5 Gb/s HO, 3,7 Gb/s LO Connectivity: VC-12, VC-3, VC-4, VC-4-Xc (X=1...16)
	EoS	ITU-T G.7041, GFP (Generic Framing Procedure) ITU-T G.707/Y.1322 in G.783, VCAT (Virtual Concatenation) ITU-T G.7042/Y.1305 LCAS (Link Capacity Adjustment Scheme) Up to 32 VCG (Virtual Concatenated Groups)
	Ethernet aggregation	VLAN stacking (Q-in-Q) Classifying function based on port ID, VLAN tag or priority bits in MPLS Policing function based on MEF5 technical specifications Up to 256 service queues
	Protection	UPSR/SNCP, MS APS, BLSR/MS-SPRING
	Synchronization	Standard: ITU-T G.813 Sources: T1, T2, T3, E1 (framed/unframed) Outputs: T4, E1 (framed/unframed)
<b>Management</b>	Protocols	SNMP, CLI, Telnet
	Interfaces	10/100 Base T, RS-232
	Functions	Fault, Performances, Configuration, Access management
<b>Environmental conditions</b>	Operation climatic	-5°C to +55°C/5-95% ETSI EN 300 019 class 3.1E
	Storage/transport	ETSI EN 300 019 class 1.1/class 2.3
	EMC compatibility	ETSI EN 300 386
<b>Power</b>	Power supply	Redundant -40 V DC to -72 V DC (optional AC 230 V)
	Power consumption	<40 W/blade
<b>Mechanical</b>	Dimensions (HxWxD)	88x448x430 mm - 2 slots, 264x448x430 mm - 6 slots
	Weight	<12 kg - 2 slots, <27 kg - 6 slots

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