



STORAGE AREA MANAGEMENT (SAM)

Optical Cable Management, Simplified

Your data center is managing more information than ever. This is the driving force behind the need for more efficient and effective storage solutions. The increasing complexity of managing a large quantity of devices and data is escalating the cost of software and services, and is drawing most of the IT community's attention. The physical layer drives much of the complexity associated with installing SAN systems, and many of the impediments associated with these implementations.

There are a number of challenges with SAN cabling at the physical layer. High-density port groupings, the sheer volume of patch cords, moves, adds, and changes, and the ports themselves—installing and tracking the actual devices and cables connecting them, can all prove to be difficult. Plus, space is at a premium in most data centers; many have narrow cabinets or four post racks with inadequate cable management space.

TE's Storage Area Management (SAM) Solution for network infrastructures is designed to reduce the bulkiness of cabling and connectors in the data center by up to 80% and enable high-density deployment with fewer costly cabinet or infrastructure upgrades. SAM can help you save time, reduce costs, maximize efficiency, and open up much needed space in your data center. It takes the complexity out of cable management, and optimizes the performance of your data center floor space, racks and electronics.

De-clutter your racks for a highly organized, eco-friendly network infrastructure. SAM delivers operational efficiency to Storage Area Network (SAN) cabling and can help customers:

- Reduce SAN switch cabling volume by up to 80%
- Implement high-density deployment with fewer cabinet or infrastructure upgrades
- Reduce space requirements by managing up to 768 fiber ports within 2 rack units
- Minimize footprint—no additional front vertical, side, or horizontal cable management devices
- Deploy in narrow cabinets or racks and limited space environments
- Minimize cable mass and slack management using linecard-optimized hydra assemblies
- Easily access ports
- Maintain unobstructed linecard maintenance
- Achieve simplified scalability
- Organize with pre-labeled ports
- Speed up deployment and reduce connection errors with color-coded and keyed connections
- Simplify installation, upgrades and migration with dedicated linecard kits
- Improve operational response time
- Remove and redeploy linecards in several quick “clicks”
- Leverage the high density Q3000 cable management system with Q3000 SAM blades

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SAM RACK MOUNT OPTICAL FIBER ENCLOSURES AND ACCESSORIES

- Accept 12 SAM adaptor plates
- Angled front face for improved visibility and cable management
- Rugged aluminum construction
- Internal guides to ease installation of trunk assemblies
- Adjustable front and rear mounting brackets included
- Panel labeling on rear to simplify location and documentation



ORDERING INFORMATION

Product Description	Part Number
Rack Mount Patch Enclosure, 2U MPO SECURE	1553761-1

SAM FAR END ENCLOSURES AND ACCESSORIES

- Accept MPO trunk assemblies (on page 3) at rear and standard LC assemblies in the front
- Available in 48-port (96-fiber) and 32-port (64-fiber)
- Maintain same port identity and labeling scheme as the hydra assemblies
- Removable Rear Mounting Bar included



ORDERING INFORMATION

Product Description	Part Number	
SAM Far End Enclosure, 1U MPO to Quad LC	32-Port	48-Port
XG OM3/OM4 (850 nm LO 50 μm) Multimode	1553533-2	1553533-1
Singlemode	1553657-2	1553657-1

Q3000 SAM BLADES

- Takes place of SAM Far End Enclosures
- Compatible with standard Q3000 frame (Reference Q3000 Series Fiber Panels, literature number 109952AE)
- Maintains port similarity with switches and SAM MPO linecard kits
- Each blade supports two SAM Trunks
- 16 LC duplex ports (32 fibers) per 1/2 RU blade
- OM3/OM4 and OS2 Versions
- Fully pre-assembled and pre-tested



ORDERING INFORMATION

Product Description	Part Number	Fiber/ Port Count	Front/Rear Connector
Q3000 SAM Blade OM3/OM4	QUFB-32FDLCMM4HR	32/16	Duplex LC/MPO
Q3000 SAM Blade Single Mode	QUFB-32FDLCMSMHR	32/16	Duplex LC/MPO

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SAM MPO LINECARD KITS

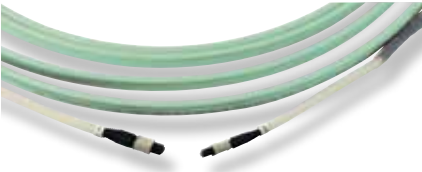
- Linecard dedicated kits to minimize cable slack
- Each kit includes all hydra assemblies and adaptor plates for associated linecard
- Pre-labeled duplex LC, MPO plug assemblies, and adaptor plate, for efficient installation
- Simplifies ordering and installation process
- Color coded adaptors minimize risk of improper plugging
- MPO connectors feature color coded keying for proper mating
- Blank plates, cable management plates, and other components also available
- Parking caps included for empty transceiver slots

ORDERING INFORMATION

	Plates	Hydras	Kits
16-Port Kit			
XG OM3 (850 nm LO 50 μm) Multimode 8GFC	2193050-1	1553608-1, 1553609-1	2193057-1
Singlemode	2193050-1	1553635-1, 1553636-1	2193058-1
32-Port Kit			
XG OM3 (850 nm LO 50 μm) Multimode 8GFC	2193051-1	1553608-1, 1553608-2, 1553609-1, 1553609-2	2193057-2
XG OM3, (850 nm LO 50 μm) Multimode Gen II, 16 GFC	2111648-1	2111649-1, 2111649-2, 2111650-1, 2111650-2	2111651-1
Singlemode	2193051-1	1553635-1, 1553635-2, 1553636-1, 1553636-2	2193058-2
48-Port Kit			
XG OM3 (850 nm LO 50 μm) Multimode 8GFC /16GFC	2193052-1	1553527-1, 1553527-2, 1553528-1, 1553528-2, 1553529-1, 1553529-2	2193057-3
Singlemode	2193052-1	1553676-1, 1553676-2, 1553677-1, 1553677-2, 1553678-1, 1553678-2	2193058-3
64-Port Kit			
XG OM3 (850nm LO 50 μm) Multimode 8GFC	2193016-1	2193045-1, 2193045-2, 2193046-1, 2193046-2, 2193047-1, 2193047-2, 2193048-1, 2193048-2	2193057-4
Singlemode	2193016-1	2193053-1, 2193053-2, 2193054-1, 2193054-2, 2193055-1, 2193055-2, 2193056-1, 2193056-2	2193058-4

SAM MPO TRUNK CABLE ASSEMBLIES

- 24-fiber assemblies (16 active when mated to hydras) provide application flexibility including 10-40-100 GbE*
- Mate with SAM adaptor plates and SAM Far End Enclosures
- Non-keyed MPO interface
- OFNR/OFNP rated
- Pre-tested and ready to install
- Additional lengths are available, please contact TE for details



ORDERING INFORMATION

End A	End B	Length	Part Number	
			XG OM3 (850 nm LO 50 μm) Multimode	Singlemode
MPO	MPO	3 m (10')	1553534-1	1553640-1
		6 m (20')	1553534-2	1553640-2
		9 m (30')	1553534-3	1553640-3
		12 m (40')	1553534-4	1553640-4
		15 m (50')	1553534-5	1553640-5
		18 m (60')	1553534-6	1553640-6
		21 m (70')	1553534-7	1553640-7
		24 m (80')	1553534-8	1553640-8
		27 m (90')	1553534-9	1553640-9
		30 m (100')	1-1553534-0	1-1553640-0

*Reference literature number #315924AE

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SAM MPO HYDRA CABLE ASSEMBLIES

- 8-Port/16-fiber assemblies
- Length optimized for minimum slack
- MPO connectors feature color coded keying for proper mating
- Individually labeled legs
- Replacement/upgrade hydras available. See SAM MPO linecard kits for details



SAM MPO ADAPTOR PLATES

- Adaptor counts match 16, 32, 48 and 64-port blades
- Color-coded keying on adaptors minimize risk of improper mating (keying on hydra side only—trunk side is not keyed)
- Port numbering matches blades
- Robust screw-in mounting system
- Blank plates and cable management plates available
- Replacement/upgrade hydras available. See SAM MPO linecard kits for details.



ORDERING INFORMATION

Description	Coupling Adaptor/Interface	Part Number
Adaptor Plate	Blank with Cable Management	2111481-1

SAM SYSTEM MISCELLANEOUS COMPONENTS

- Mounts to the back of 19-inch racks
- Designed to provide additional cable support and routing control behind 19-inch racks and panels
- Slotted manager bar for easy tie down
- Horizontal and vertical mounting option for tie down bar



ORDERING INFORMATION

Description	Part Number
Cable Management Bracket Kit	1553658-1

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PRODUCT SHEET

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