Automating Fiber Optic Interconnections

Applications

- Remote Switching Nodes
- Backup & Schedules
- Fiber Plant surveillance
- Analogue signals
- 10Gbps, 40Gbps or 100Gbps signals

Highlights

- Automated up to 96 ports
- Single-Mode & Multi-mode fiber & connectors
- Native switching elements with single, dual or high-density fiber capability
- Signal type & protocol agnostic, on any port
- Local- or remote-controlled
- Multi-user operation

Automated Optical Distribution Frame (AODF-MN)

Capitalizing on TeliSwitch's patented opto-mechatronic fiber switching architecture, the AODF-MN offers modular, non-blocking, remote, passive fiber cross-connects for up to 96 optical ports.

Why remote automated optical fiber management?

The optical infrastructure represents a heavy investment for any organization, from the civil work to the transmission nodes. And with growing dependency on reliable communications, the pressure is on to design, plan, execute in shorter implementation times and with reduced budgets.

Automated Fiber Management is thus unavoidable, to secure the configuration of the network, to shorten planning times and to deliver the quickest, most precise implementation, together with remote troubleshooting, support for backup plans and disaster recovery.

Automating the fiber cross-connects becomes inevitable.

TeliSwitch AODF automated cross-connect improves the optical layer management efficiency in networks, reduces delays from planning to execution, eliminates multiple steps to reconfigure circuits, all this while eliminating the most common concerns such as wrong information, contaminated fiber connectors, while guaranteeing the upmost in optical performance and transparency, effectively turning a passive investment into a dynamic responsive network resource, now allowing newer level of efficiencies and novel services.

How do we do it?

TeliSwitch proprietary and patented opto-mechatronics cylindrical architecture enables implementation of compact, mini to small, scale automated optical distribution frames, non-blocking, with up to 96 optical ports. And each of these ports can be SMF or MMF, single- or multi-fiber (duplex, 12/24FO).

AODF-MN Frame Front View

Applications in Remote Switching Environments

AODF-MN addresses challenges with fiber optic infrastructure management in remote switching stations: fiber optic connections are automated, reliable connections and configurations, speeding the implementation of new services or work-around measures, allowing staff involvement in other activities, opening the possibility to add optimize the network resources in ways which are not feasible when dependent on manual patching.

Specifications (1)

Configurations	Management
➤ Modular switching capacity, 24x24, 48x48, 72x72, 96x96 ports (or combinations) • Any-any, Non-blocking	➤ Physical interface • 10/100 Base-T (6m CAT-5 cable, with RJ-45 socket)
➤ Fiber Terminations Options • Stubbed: 24FO per cable, 5m length(3) • Connectorized: LC/UPC connectors, 5m length(3)	➤ Web-based GUI • HTTPS, protected with SSL & X.509 certificates, English ➤ EMS interface • HTTPS, protected with SSL & X.509 certificates
Optical Performance	**Power, Size, Environment**
➤ Fiber Type • Single-Mode: G.657A2 • Multi-Mode: OM3 ➤ Connections: 1,000 cycles / internal connector	➤ Input power • Voltage: -48VDC • Current draw: 7W in standby, 70W active • Optional: 220VAC / -48VDC converter
➤ Insertion Loss(3) • Single-Mode: typical 0.3dB; max < 0.5dB	➤ 19" rack-mountable ➤ Color Options: Dove Grey / Black
➤ Optical Return Loss(3) • Single-Mode: > 45dB • Multi-Mode: > 30dB	➤ Temperature & Humidity • Storage: -10°C to +70°C, < 90% non-condensing • Operating: 0°C to 50°C, < 90% non-condensing • Short-term Operating: -5°C to +55°C, < 90% non-condensing

Notes:

1) *Consult your TeliSwitch Sales partner if different specifications are needed*
2) *Specifications valid when attached to a quotation, otherwise subject to change without prior notice*
3) *Specifications refer to AODF-MN configuration with stubbed cables termination*

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