

## Digital Loop Carrier for fiber optic



### Digital loop carrier for fiber optic cables (AODF-MN)

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

#### Why remote automated optical fiber management?

The optical network infrastructure represents a heavy investment for any organization, from the customer to the central office. 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 optical fiber network in the digital loop becomes inevitable.

TeliSwitch AODF automated Digital loop carrier system improves the optical layer management efficiency in optical 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 optical fiber network resource, now allowing newer level of efficiencies and novel services. The fiber in the loop system are functionally equivalent to Digital loop carrier systems. Fiber in the loop architectures vary from simply deploying optical fibre feeder plants (Between central office and remote terminal sites) to fiber to the curb" and ultimately "fiber to the home" where an optical network unit (ONU) is located at each home.



### Applications

- Remote managing of optical fiber digital loop
- Backup & Schedules
- Optical Fiber surveillance Analogue signals
- 10Gbps, 40Gbps or 100Gbps signals

### Highlights

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

## How do we do it?

TeliSwitch proprietary and patented opto-mechatronics cylindrical architecture enables implementation of compact, mini to small, scale automated optical digital loops, 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).

## Specifications <sup>(1)</sup>

| Configurations  | Management   |
|---|--|
| <ul style="list-style-type: none"> <li>➤ Modular capacity, 24x24, 48x48, 72x72, 96x96 ports (or combinations)                             <ul style="list-style-type: none"> <li>• Any-any, Non-blocking</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>➤ Physical interface<br/>10/100 Base-T (6m CAT-5 cable, with RJ-45 socket)</li> </ul>   |
| <ul style="list-style-type: none"> <li>➤ Fiber Terminations Options<br/>Stubbed: 24FO per cable, 5m length <sup>(3)</sup><br/>Connectorized: LC/UPC connectors, 5m length <sup>(3)</sup></li> </ul>                             | <ul style="list-style-type: none"> <li>➤ Web-based GUI<br/>HTTPS, protected with SSL &amp; X.509 certificates, English</li> <li>➤ EMS interface<br/>HTTPS, protected with SSL &amp; X.509 certificates</li> </ul>  |
| Optical Performance   | Power, Size, Environment   |
| <ul style="list-style-type: none"> <li>➤ Fiber Type<br/>Single-Mode: G.657A2<br/>Multi-Mode: OM3</li> <li>➤ Connections: 1,000 cycles / internal connector</li> </ul>   | <ul style="list-style-type: none"> <li>➤ Input power<br/>Voltage: -48VDC<br/>Current draw: 7W in standby, 70W active<br/>Optional: 220VAC / -48VDC converter</li> </ul>  |
| <ul style="list-style-type: none"> <li>➤ Insertion Loss <sup>(3)</sup><br/>Single-Mode: typical 0.3dB; max &lt; 0.5dB</li> </ul>  | <ul style="list-style-type: none"> <li>➤ 19" rack-mountable</li> <li>➤ Color Options: Dove Grey / Black</li> </ul>   |
| <ul style="list-style-type: none"> <li>➤ Optical Return Loss <sup>(3)</sup><br/>Single-Mode: &gt; 45dB<br/>Multi-Mode: &gt; 30dB</li> </ul>   | <ul style="list-style-type: none"> <li>➤ Temperature &amp; Humidity<br/>Storage: -10°C to +70°C, &lt; 90% non-condensing<br/>Operating: 0°C to 50°C, &lt; 90% non-condensing<br/>Short-term Operating: -5°C to +55°C, &lt; 90% non-condensing</li> </ul> |

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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