

Mosaic Network Controller (MNC)

Real-time GIS-based solution for fiber network surveillance

Adtran's Mosaic Fiber Director is provided as a client license at RTU level - which integrates with the Mosaic Network Controller Software at server - to empower network operators with integration of GIS geographically.

With built-in alerts via email, SMS, or third-party systems, the platform ensures that the right teams are notified immediately—helping **accelerate response times and minimize operational delays**.

Additionally, its GIS-based mapping and documentation tools provide **accurate visualization and better management of fiber assets**, enabling more efficient maintenance and long-term planning. Overall, Mosaic Fiber Director helps organizations **enhance network reliability, optimize operations, and deliver a superior customer experience**.

Key Functions:

- Fiber route visualization
- Map-based display of network
- Fault localization on maps
- OTDR trace visualization
- Supports web, desktop and mobile access

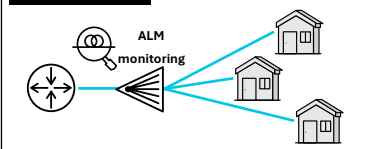
Advanced Capabilities:

- Converts optical distance into **geographical coordinates**
- Enables **precise real-world fault localization**
- Supports **third-party GIS integration**
- Provides enhanced operational workflow for NOC teams

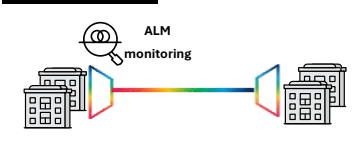
Applications

- Advanced fiber plant monitoring, assurance, and visualization
- Centralized visibility of entire fiber plant infrastructure
- Real-time, real-world situational awareness
- Proactive notification of fiber faults with precise geographical fault location
- PON and point-to-point topologies

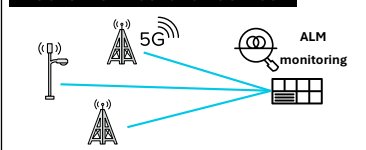
PON Networks



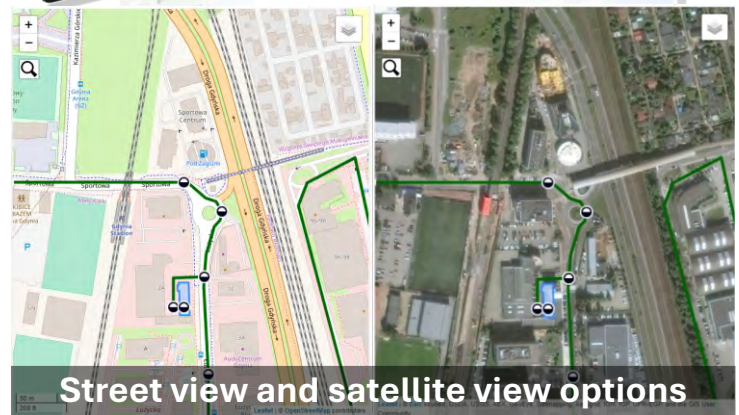
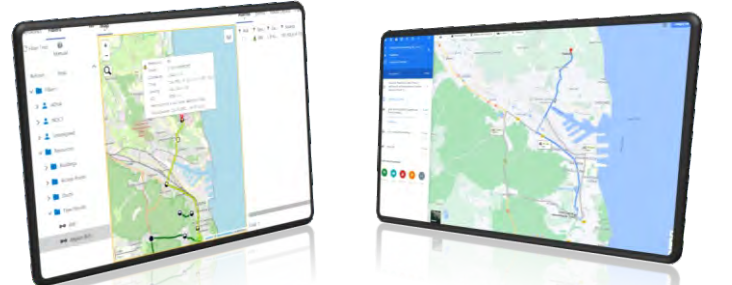
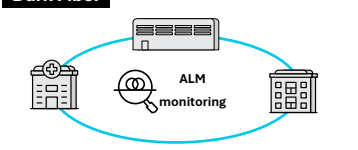
DWDM Systems



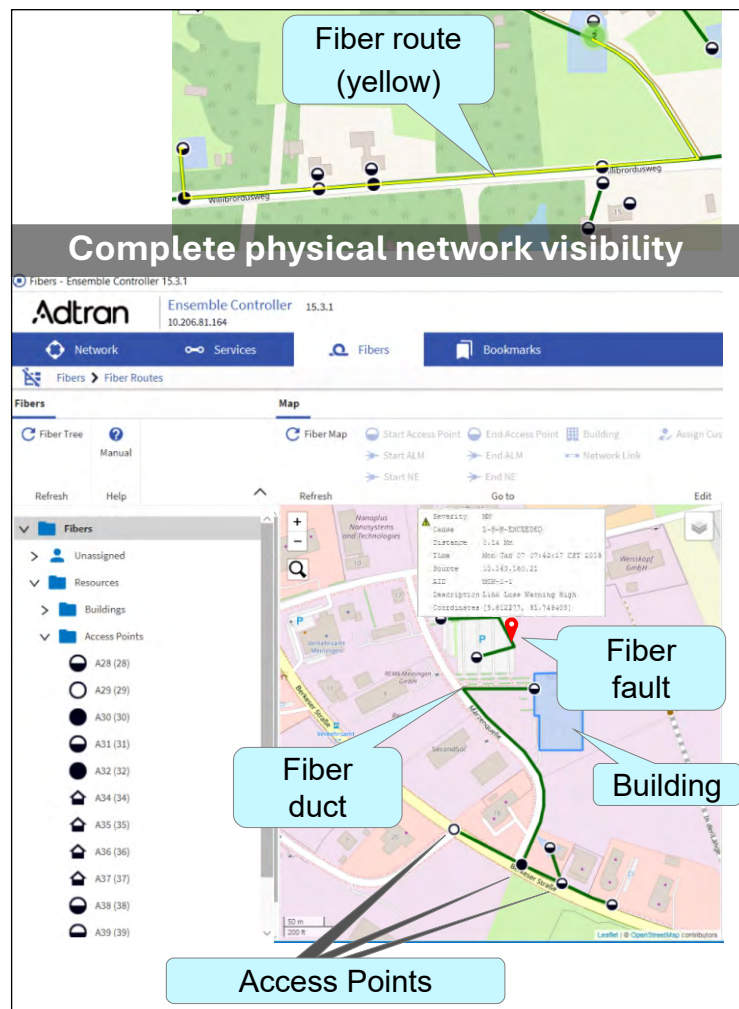
Mobile Fronthaul and Backhaul



Dark Fiber



Street view and satellite view options



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Technical Specifications:

Server requirements – GIS Server

Parameter	Specification	Units
RAM	16	GB
CPU	2.2	Ghz
Hard Disk Space	110	GB
System Architecture	64-bit	
Supported OS (*)	CentOS/RHEL	

Client requirements - Fiber editor

Parameter	Specification	Units
RAM	8	GB
CPU	2.5	Ghz
Hard Disk Space	10	GB
System Architecture	64-bit	
Supported OS	Windows 10	

Communication Protocols

Interface	Protocols
ALM communication	SNMP, REST, FTP
MNC Communication	HTTP, HTTPS, WFS API
Third-Party Systems	WFS API

Geographic File Support

File Format	Support
Shape (SHP)	Supported natively
KMZ/KML	Supported natively
Other WGS-84 compliant formats (**)	Supported after conversion

(**) Any standard file format can be easily converted to SHP files for import

Ordering Information

Software Licenses:

Product Code	Product Name	Product Description
1091008940	ENC/EFD	Mosaic Fiber Director license: Serves for geographical management of fibers in connection with ALM devices NOTE: A current MNC license is required to operate the software
1091008941	ENC/EFD/Editor	Mosaic Fiber Editor Application license for one client

ALM connection Licenses:

Product Code	Product Name	Product Description
1091009401	ENC/EFD/CL/M	Mosaic Fiber Director connection license for one ALM16 unit
1091009402	ENC/EFD/CL/L	Mosaic Fiber Director connection license for one ALM64 unit

Upgrade licenses are available.