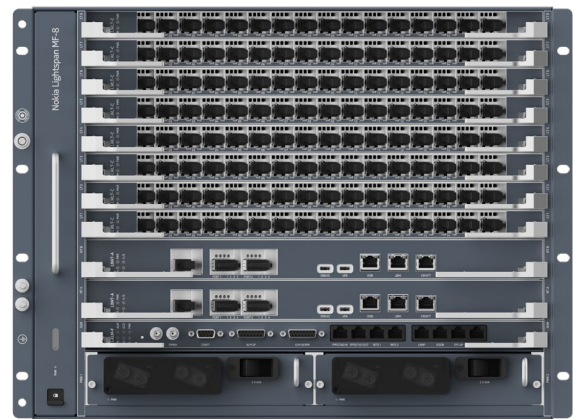


## Nokia Lightspan MF-8

The Nokia Lightspan MF-8 is a next generation fiber access node designed for the Fiber for Everything era, growing beyond residential broadband services on PON. This high-capacity fiber access solution delivers 10G, 25G, 50G and future 100G PON services with high availability and no single point of failure. Like other members of the Nokia Lightspan MF family, the Lightspan MF-8 is based on the Nokia Quillion chipset and combines deployment flexibility with market leading density, throughput, reliability, and latency. It gives operators a mid-size solution that can be deployed in any location, from cabinets to central offices and data centers, for any service and any PON technology.

The Nokia Lightspan MF-8 delivers all the features needed for the Fiber for Everything era. With eight line card slots, it provides a form factor that integrates very easily in existing telecommunication infrastructure, complementing deployment cases between the Nokia Lightspan MF-14 and MF-2. With no single point of failure and enhanced reliability, it delivers true mission critical broadband while the state-of-the-art Quillion chipset brings enhanced power efficiency and the low latency needed in Industry 4.0 and 5G transport applications. The Nokia Lightspan MF-8 is fully programmable, with modular software for agile deployments; open and SDN-programmable control and management interfaces for higher levels of network automation and premium operational efficiency; and fast telemetry that can drive new AI/ML applications with the Nokia Altiplano Access Controller.



## Key benefits

- Premium platform for delivery of any PON technology: 10G, 25G, 50G and future 100G PON
- Complements Nokia Lightspan MF-2 and MF-14 for medium-size POPs and cabinets for high revenue-generating opportunities
- More efficient option than stacked pizza box OLTs
- Increased coverage for up to 16k subscribers per OLT
- Operational efficiency through in-service operations, AI/ML, automation
- Agility to onboard new applications and support new business models

## Key features

- Member of the Lightspan MF platform using the same LT and NT cards
- Deployment flexibility: horizontal and vertical mounting options, front- and mid-mount option, various air-flow options
- Flexible PON configuration up to eight line cards
- Flexible uplink configuration
- Highly modular software and hardware architecture for in-service operations
- Zero single point of failure to ensure reliability needed for mission-critical broadband
- Quillion based hardware for high port density, power efficiency and low latency
- Fully programmable platform with open and standardized management & control interfaces

## Technical specifications

### Full service platform

- Multiservice access support
  - IPTV services
  - Multimedia service

- High-speed Internet access
- Business access
- Mobile traffic transport
- Wholesale
- LT support
  - 16-port card supporting GPON, XGS-PON, multi-PON and 8-port 25G PON
- Network Termination (NT) support:
  - Lightspan MF LBNT-A
    - 2 Tb/s switching matrix (bidirectional)
    - Active/Active redundancy
    - 200 Gb/s uplink capacity

### Management

- Fully managed by the Nokia Altiplano Access Controller

### Eco-sustainability

- Product complies with the EU Directive 2011/65/EU as amended including by Directive 2015/863/EU concerning the Restriction on Hazardous Substances (RoHS) for lead, cadmium, mercury, hexavalent chromium, polybrominated biphenyl (PBB), polybrominated diphenyl ether (PBDE), Bis(2-Ethylhexyl) phthalate (DEHP), Benzyl butyl phthalate (BBP), Dibutyl phthalate (DBP), Diisobutyl phthalate (DIBP)
- Product collection and treatment under Nokia responsibility complies with the national laws on product treatment applied at the end of life for Wastes from Electrical and Electronic Equipment (WEEE) implementing the European Directive (2012/19/EU)
- Product packaging materials are free from hydrochlorofluorocarbon (HCFC)
- Plastic product packaging material is marked according to ISO 11469, referring to ISO 1043 (97/129/EEC)



## Standards compliance

- Environmental
  - ETS EN 300 019-1-1 storage – Class 1.1 weather-protected, partly temperature controlled locations
  - ETS EN 300 019-1-2 transport – Class 2.3 public transportation
  - ETS EN 300 019-1-3 stationary use – Class 3.1E and Class 3.3
  - GR-3108-CORE Class 1 and Class 2
  - GR-63-CORE for Temperature and Humidity
  - TP76200MP
- Powering
  - ETS EN 300 132-2
- Protection
  - ITU-T K.20 enhanced and K.45 basic
  - GR-1089-CORE for Lightning and power fault.
- Safety
  - IEC 62 368-1 / EN 62 368-1
  - AS/NZS 62368-1
  - UL62368-1
  - CAN/CSA-C22.2 No. 62368-1-14
  - GR-63- CORE for Fire Spread and Surface Temperature
  - GR-1089-CORE for Electrical Safety, Bonding and Grounding

- EMC
  - ETS EN 300 386 for telecommunication network equipment
  - ETS ES 201 468
  - GR-1089-CORE – for Radiated Emission, Conducted Emission- FCC part 15 Class
  - ICES-003 issue 7 (2020)
  - CAN/CSA CISPR 22-10
  - ANSI C63.4 (2014)
  - VCCI-CISPR32: 2016
- Acoustic noise
  - ETS 300 753

## Operating conditions

- Operating temperature range (at the air inlet of the shelf): -40°C to +65°C (-40°F to +149°F)
- Relative humidity: 5% to 93% (non-condensing)
- Over-temperature sensors and over-temperature shutdown
- Replaceable low noise Fan Module & Filter

## Power

- DC-powered:
  - 48/60 V DC nominal
  - Fully redundant power feeding (branch A and B)

## Dimensions

- Height (w/o bottom dust filter assembly): 355 mm (14 in.)
- Width (mounting center distance): 465 mm (18.3 in.) - can be mounted in 19-inch racks
- Depth (overall): 287.3 mm (11.3 in.)

## About Nokia

At Nokia, we create technology that helps the world act together.

As a B2B technology innovation leader, we are pioneering networks that sense, think and act by leveraging our work across mobile, fixed and cloud networks. In addition, we create value with intellectual property and long-term research, led by the award-winning Nokia Bell Labs.

Service providers, enterprises and partners worldwide trust Nokia to deliver secure, reliable and sustainable networks today – and work with us to create the digital services and applications of the future.

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