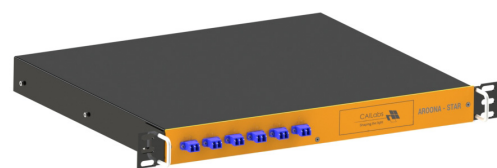


AROONA-STAR

10 Gb/s transmissions and more over a multi-mode infrastructure, without having to replace the fibers.

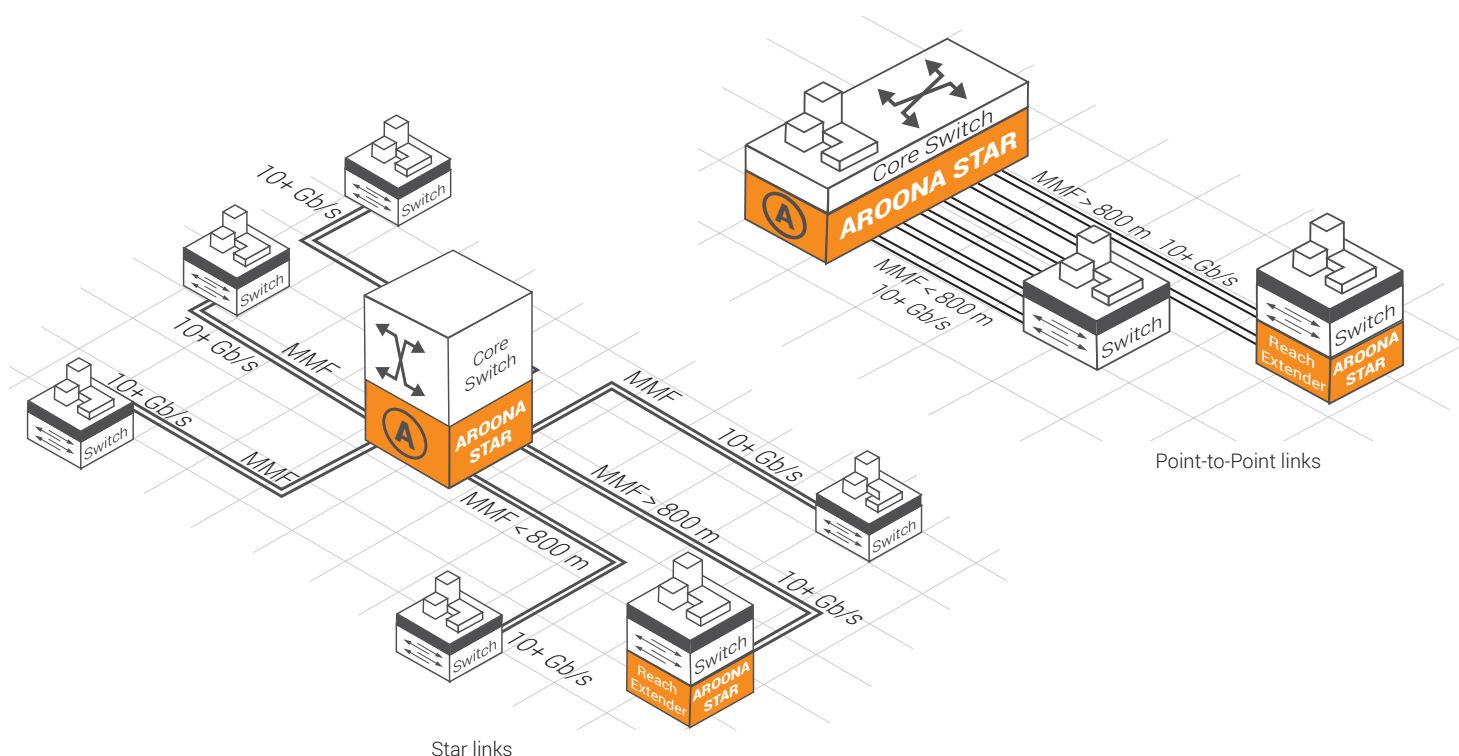
The majority of fibers deployed in local networks are standard **multi-mode optical fibers** (OMx, 62.5/125 μm or 50/125 μm). These fibers are limited in bandwidth. Depending on the topology and lengths of the cables deployed in the network architectures, the transmitted bit rates are limited to 1 Gb/s or even 100 Mb/s.



By eliminating modal dispersion, CAILabs' **AROONA-STAR** circumvents this limitation without replacing the existing fibers. This **innovation** provides a flexible and affordable solution that reduces the investment in upgrading the cabling infrastructure. **Regardless of the network topology**, the **AROONA-STAR** box can transport **10 Gb/s or more over 6 multi-mode fiber pairs** and thereby support evolutions in network traffic, without long, complex and expensive new deployment.

For links <800 m, the **AROONA-STAR** box is installed **at just one end** of the fiber links. At remote sites, only the multi-mode patch cords should be changed by standard single-mode patch cords.

For links >800 m, a **REACH EXTENDER** box is required **at the remote site** at the other end of the fiber links in order to ensure modal adaptation and thereby increased bandwidth of long multi-mode fibers.



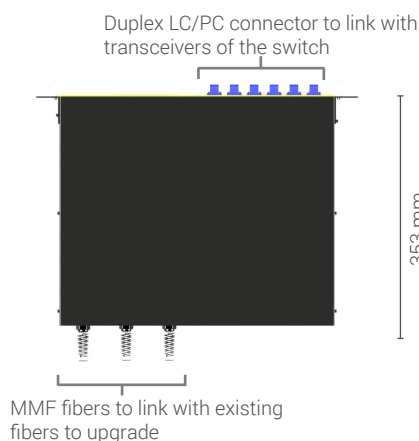
Passive system and independent of the communication protocol used, it works with either 1,310 or 1,550 nm single-mode commercial transceivers. **AROONA-STAR** is also compatible with **WDM technologies**, enabling a gradual and flexible increase of the network capacity towards very high speeds in addition to ensuring the **durability** of the cabling infrastructure.

Technical specifications

PARAMETER	AROONA-STAR
Operating wavelength	O-band (1310 nm) - C-band (1550 nm)
Reach	< 800 m (standard)
	< 10 km (with Reach Extender installed at the remote site)
Number of duplex channels	Up to 6
System capacity	10+ Gb/s per channel - Compatible with WDM Independent data rate over each channel
Insertion loss	4 dB (typical: 2.5 dB)
Communication protocol	Transparent to standard protocols (Ethernet, Fiber Channel, etc)
Compatible transceivers	Any type of single-mode transceiver in O-band or C-band Format : SFP, SFP+, XFP, QSFP, GBIC, XENPACK, X2

Physical characteristics

PARAMETER	VALUE
Fiber type	62.5/125 μm (OM1) or 50/125 μm (OM2 / OM3 / OM4 / OM5)
Input / Output	Duplex LC/PC connector in front side - MMF fiber in back side
Operating temperature	-5°C to +45°C (EN 300 019-1-3 Class 3.2)
Housing size	H : 44 mm x L : 486 mm x P : 353 mm Rack 19" 1U



All specifications are correct at the time of production of this specification sheet. Any design or specification can be changed without prior notice.