

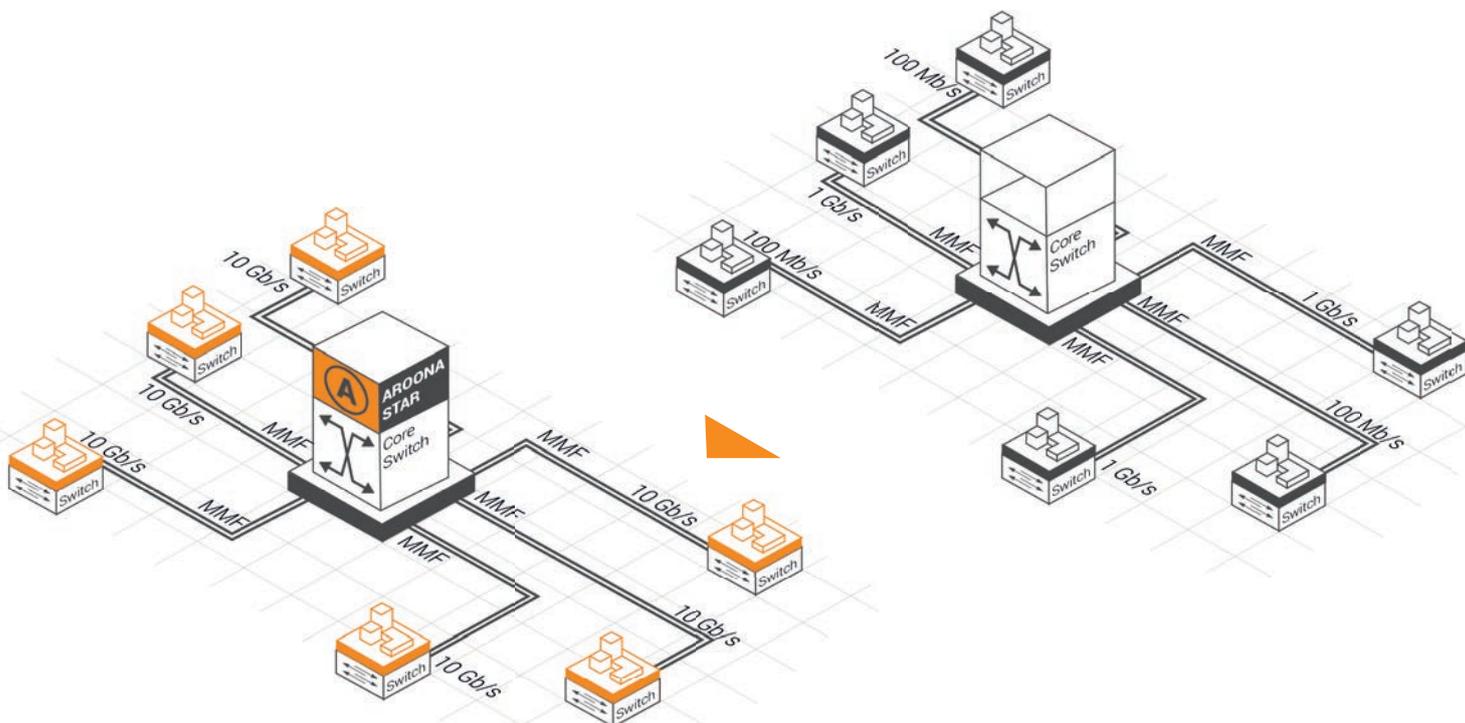
AROONA-STAR

10 Gb/s transmissions for a multi-mode infrastructure in star topology without changing fibers.

Ubiquitous in LANs, the **star topology** is very flexible in terms of technical support and network troubleshooting. The main drawback, in comparison to other network topologies, is the length of the cables deployed in this architecture. In addition, standard multi-mode optical fibers (OM) in LANs have a **limited bandwidth**: depending on distance, bit rates are as low as 1 Gb/s or even 100 Mb/s.



AROONA-STAR by CAILabs overcomes this limitation without changing existing fibers. By eliminating the investment costs of modernizing the cabling infrastructure, this innovation offers an **affordable and flexible solution** to transmit throughputs of **10 Gb/s**. It therefore supports traffic evolutions within the star network.



Simply installed in the network core, **AROONA-STAR** solution increases the capacity of **6 links** of a network architecture in star topology at **10 Gb/s** each without a long, complex and expensive new fiber roll-out. The **system is passive and independent of the communication protocol used. It works with commercial single-mode transceivers** at 1310 or 1550 nm.

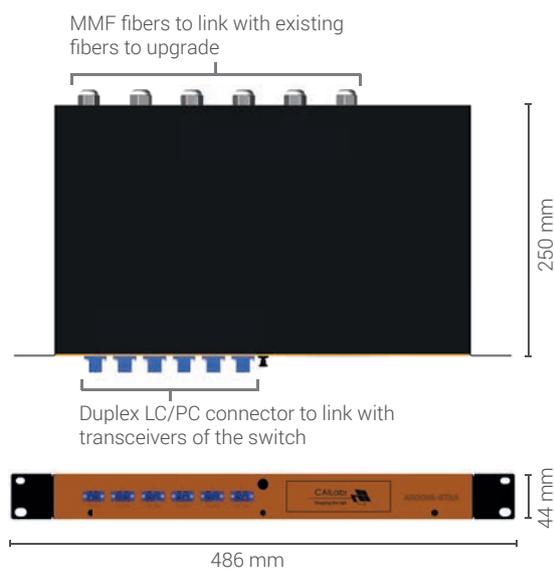
AROONA-STAR is also compatible with **WDM technologies**, allowing a **flexible and progressive increase** of the network capacity to high bit rates while also future-proofing the cable infrastructure.

Technical specifications

PARAMETER	AROONA-STAR
Operating wavelength	O-band (1310 nm) - C-band (1550 nm)
Reach	< 800 m
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 (1000BASE-LX/-EX or 10GBASE-LR/-ER type) Format : SFP, SFP+, XFP, GBIC, XENPACK, X2

Physical characteristics

PARAMETER	VALUE
Fiber type	62.5/125 μm (OM1) or 50/125 μm (OM2 / OM3 / OM4)
Input / Output	Duplex LC/PC connector in front side - MMF fiber in back side
Operating temperature	+5°C to +40°C (EN 300 019-2-3)
Housing size	H: 44 mm x L: 486 mm x P: 250 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.