

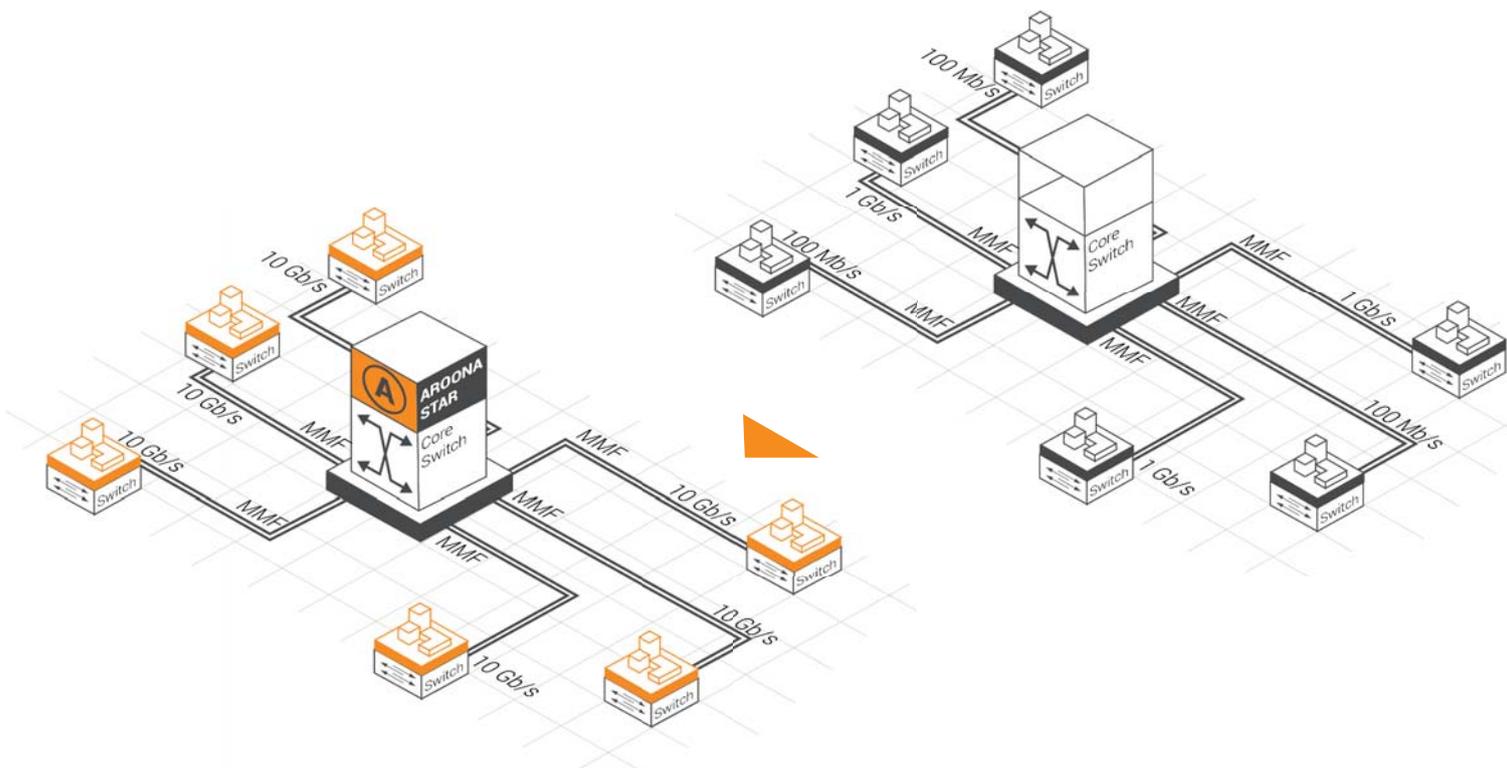
AROONA-STAR

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

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



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



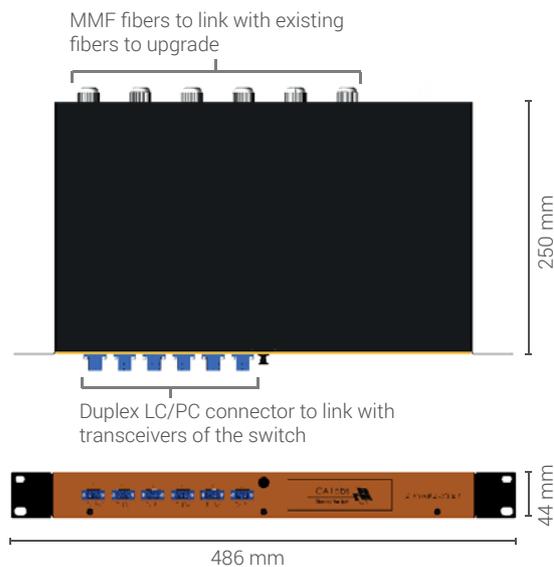
Simply installed in the network core, **AROONA-STAR** solution increases at **10 Gb/s** the capacity of **6 links** of a network architecture in star topology without a long, complex and expensive new fiber roll-out. The system is **passive** and **independent from the communication protocol** used. It works with **commercial single-mode transceivers** at 1310 nm. **AROONA-STAR** is also compatible with **WDM technologies**, allowing a **flexible** and **progressive capacity increase** of the network to high bit rates and future-proofing the cable infrastructure.

Technical specifications

| PARAMETER | AROONA-STAR |
|---------------------------|--|
| Operating wavelength | O-band (1310 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 (1000BASE-LX or 10GBASE-LR 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.