AROONA CONNECT
BY CAILABS

Instantly boost your local area network throughput

A passive adapter designed for network and IT managers. Easy-to-use, it increases the optical fibers throughput up to x400.

Plug and Play solution

Compatible with standard single-mode SFP transceivers

Compatible with all network and protocol types

Low carbon footprint solution

Made in **FRANCE**

RESPECT FOR THE ENVIRONMENT **RECYCLING OF INFRASTRUCTURE**

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cailabs
SHAPING THE LIGHT

www.cailabs.com

Poor network throughput often caused by existing optical fiber limitations

Many sites (hospitals, high schools, factories, local authorities, etc.) have to **upgrade their local networks** to boost throughput and **support new bandwidth-hungry applications** such as video surveillance or connected and interactive tools.

AROONA converts «obsolete» multimode fibers (the life span of any optical fiber can exceed 50 years) **into single-mode fibers to achieve high data speed**. It is thus **not necessary to replace your fibers.**

When achieving high speed (1 Gb/s to 40 Gb/s) in local networks becomes a breeze

AROONA-CONNECT is designed for local network managers (IT managers in particular) who want to **upgrade their network easily** - without the intervention of a technician.

AROONA-CONNECT is a solution for **short and medium distance fiber links (<550 m)** between and within buildings in local area networks (LAN). This connectorized jumper can **increase the throughput of campus networks** (industries, universities, hospitals, local authorities, etc.) in record time. With two standard connectors, it can connect modern active equipment to old generation fiber.

Plug and play
no training required to install it

Fast delivery

Several configurations
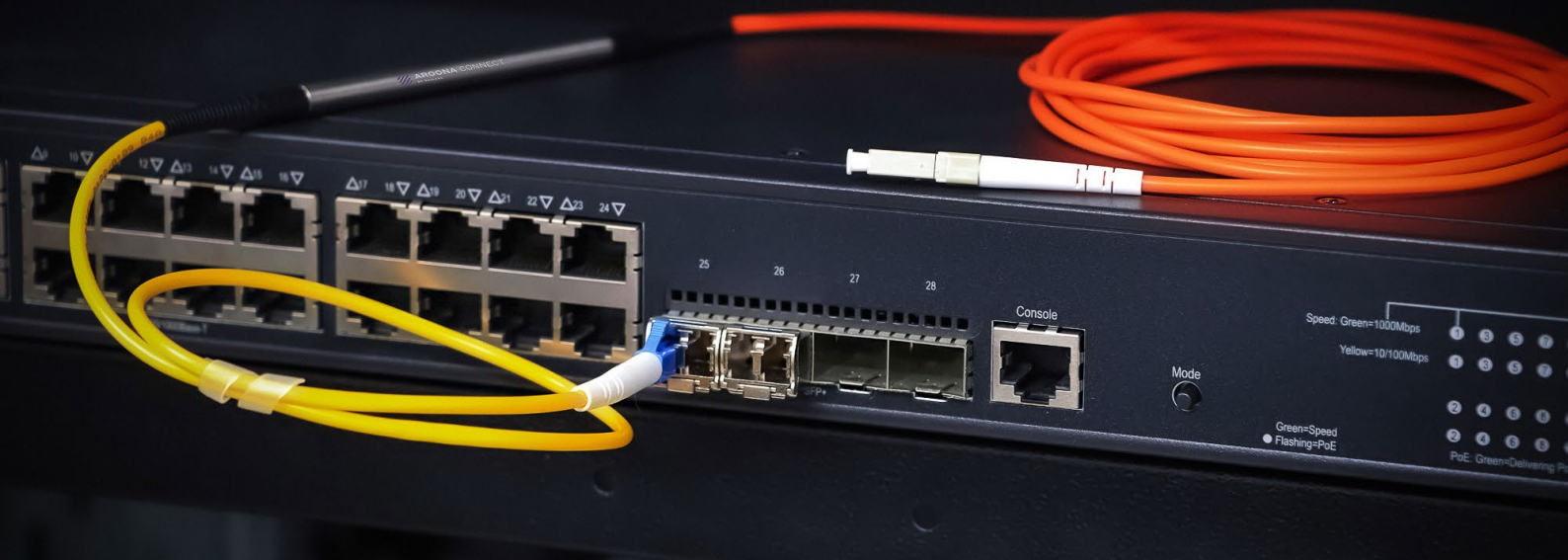to match your patch panels and applications

Compatible
with standard single-mode SFP transceivers
with Ethernet, POLAN, RF/TV over fiber, WDM, etc.

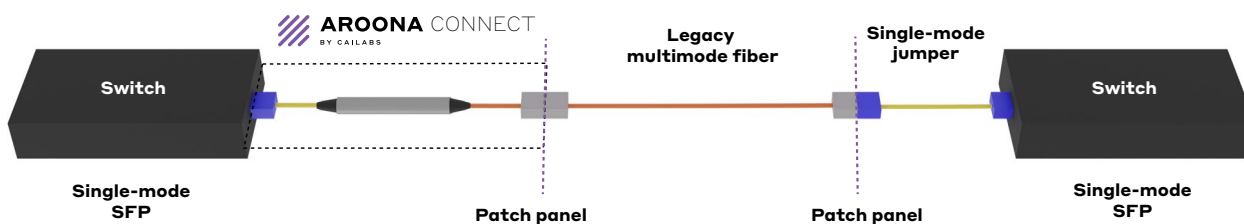## An environmental and economic
impact

- **Passive solution:** no power supply or electronics
- **No need for new single-mode fiber cabling** or civil works
- **Reduced cost** compared to rip-and-replace projects, up to 10 times cheaper
- **Low carbon footprint:** existing cabling is reused

A simple installation in 3 steps

The installation of **AROONA-CONNECT** does not require the intervention of an external service provider. The upgrade duration is reduced, as you do not depend on the availability of your partner. See the implementation diagram below:

1. **Replace** existing **active equipment and jumpers** with single-mode equipment
2. **Clean the connectors** with the wipes provided
3. **Install AROONA-CONNECT** as shown

   *Benefit from **optimized throughput** over your multimode network*

Shift into Passive Optical Network (POLAN)
with AROONA-CONNECT

POLAN is a passive distribution network architecture that reduces energy consumption and operation and maintenance costs. This network type can provide up to 10 Gb/s per user, however it is only compatible with single-mode optical fiber. With **AROONA-CONNECT**, there is no need for the intrusive, complex and costly deployment of single-mode fiber. This solution can be used to convert backbone and horizontal links.

A «**money back guarantee**» is included in the AROONA-CONNECT offer.
Contact your distributor or Cailabs for more information.

Technical spécifications

PARAMETERS	
Reach	Up to 550 m (1800 ft.)
Bandwidth	From 1 to 40 Gbps (under the condition of undamaged connectors)
Type of fiber	**Single-mode fiber** OS2 9/125 µm **Multimode fiber** OM2 50/125 µm
Connectique	**Single-mode connector** LC/UPC or SC/APC **Multimode connector** ST/UPC or LC/UPC
Number of input/output	1
Legacy fiber compatibility	Any type of multimode fiber: 62.5/125 µm (OM1) or 50/125 µm (OM2/OM3/OM4/OM5)
Protocol and network	Dual (1 Connect) or BiDir (2 Connect) links Compatible with GPON, XGPON, XGSPON and WDM
Insertion loss	< 2,5 dB (typical value: 2 dB)
Wavelength	[1250 nm – 1600 nm]
Transceiver compatibility	Single-mode transceivers, dual or bidirecctional (type 1000BASE-LX/EX, 10GBASE-LR/ER, 40GBASE-LR4/ER4)
Opration temperature	-40°C à +70°C ETSI EN 300 019-1-3 classe 3.4
Shipping tolerance	ETSI EN 300 019-1-2 classe 2.3
Dimensions	Total length: 3 m +/- 20 cm Dimensions of the tube (w/o cable boot): d125 x 7.5 mm3 Dimensions of the tube (w/ cable boot): d180 x 7.5 mm3 Single-mode fiber length: 0.5 m +0/-10 cm, Multimode fiber length: 2.5 m +/-10 cm Fiber tubing (SMF/MMF): 3 mm

Reference AROONA-CONNECT		SMF connector	MMF connector
	C1SAMAM2	LC/UPC	LC/UPC
	C1SAMDM2	LC/UPC	ST/UPC
	C1SBMAM2	SC/APC	LC/UPC

Founded in 2013, **Cailabs** is a French deep tech company which designs, manufactures and distributes innovative photonic products for for space, industry (laser machining), telecommunications or defense. A global leader in complex light shaping, its technology is currently protected by 22 patent families. Its innovative optical components are used in a variety of sectors and have contributed to several world records (notably the optical fiber bandwidth record achieved by the Japanese operator KDDI).

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