



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



Poor network throughput often caused by legacy 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 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

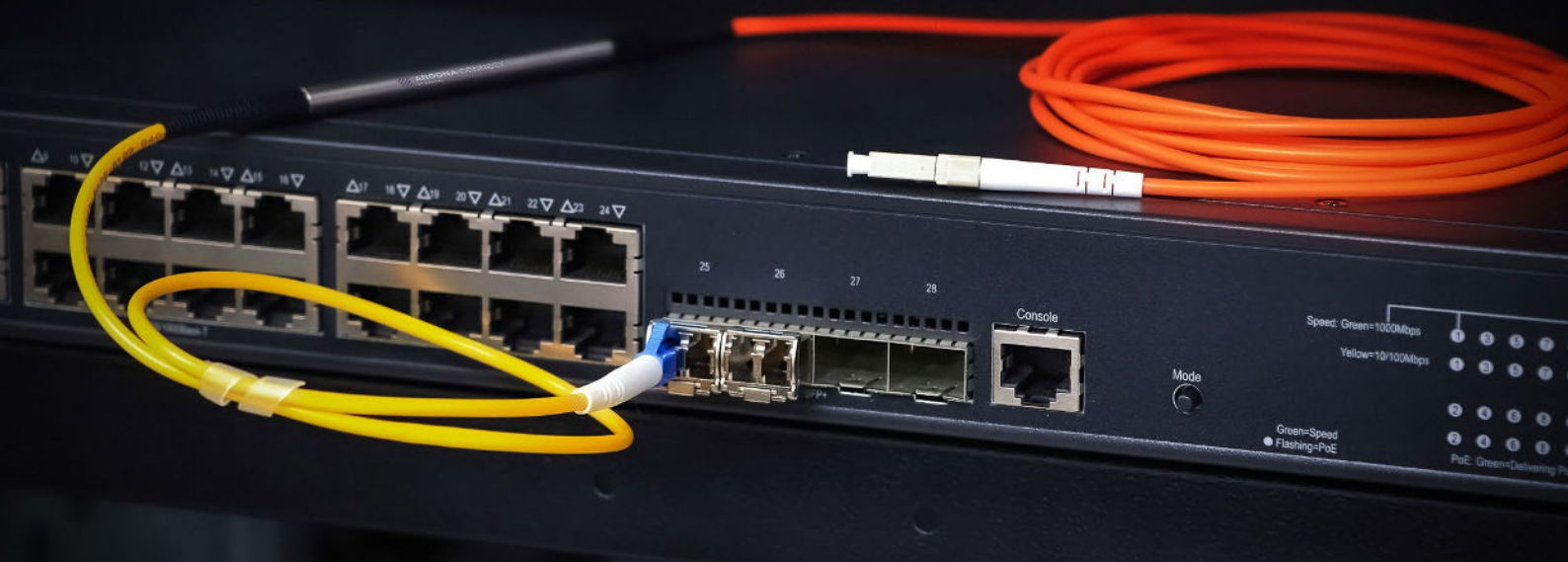
with standard single-mode SFP transceivers
with Ethernet, POLAN, RF/TV over fiber, WDM, etc.

An environmental and economic

impact

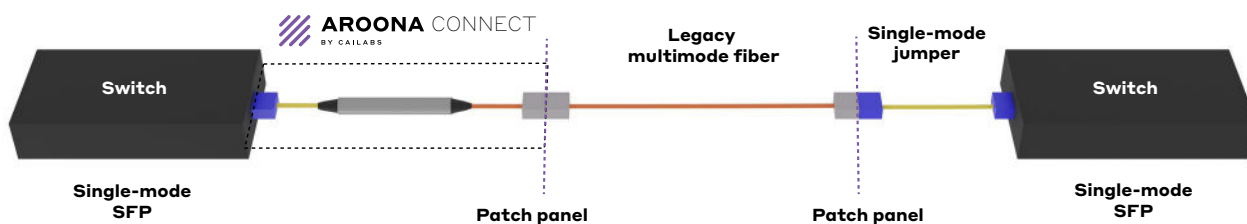
- **Passive solution:** no power supply or electronics
- **No need for new single-mode fiber cabling** or civil works
- **Reduced cost** compared to rip and replace projects, up to 10 times cheaper
- **Low carbon footprint:** existing cabling is reused





A simple installation in 3 steps

The installation of **AROONA-CONNECT** does not require the intervention of an external service provider. IT reduces the implementation time 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

Deploy a 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 specifications

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 bidirectional (type 1000BASE-LX/EX, 10GBASE-LR/ER, 40GBASE-LR4/ER4)		
Operation 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 mm ³ Dimensions of the tube (w/ cable boot): d180 x 7.5 mm ³ Single-mode fiber length: 0.5 m +0/-10 cm, Multimode fiber length: 2.5 m +/-10 cm Fiber tubing (SMF/MMF): 3 mm		
AROONA-CONNECT reference		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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