



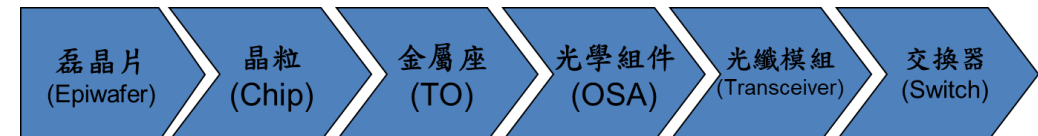
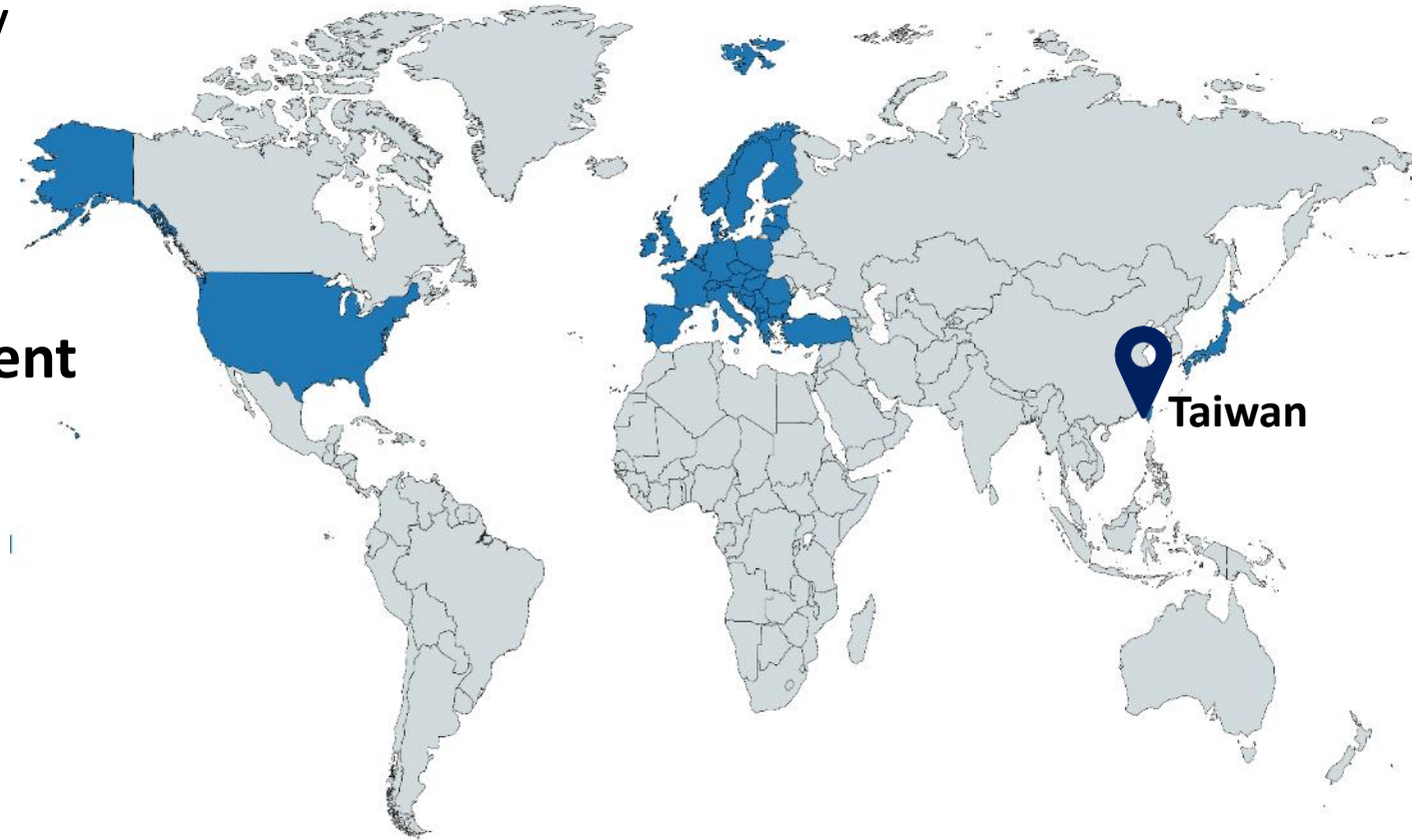
# Company Profile

Raymond Tsai

Key Account Manager  
OptoMedia Inc.

# Who we are?

- **Taiwan based fiber solutions company**
- Capital: **USD \$8M**
- Main shareholders: **institutional investors, public listed companies** in Taiwan Stock Exchange and **management team**
- Sales Area :
  - **USA , 50%**
  - **Europe, 30%**
  - **Japan, 20%** (Sony, Panasonic and Hitachi)
- Key component (**laser diode, photo detector**) from parent company



# Company Profile

## Milestones

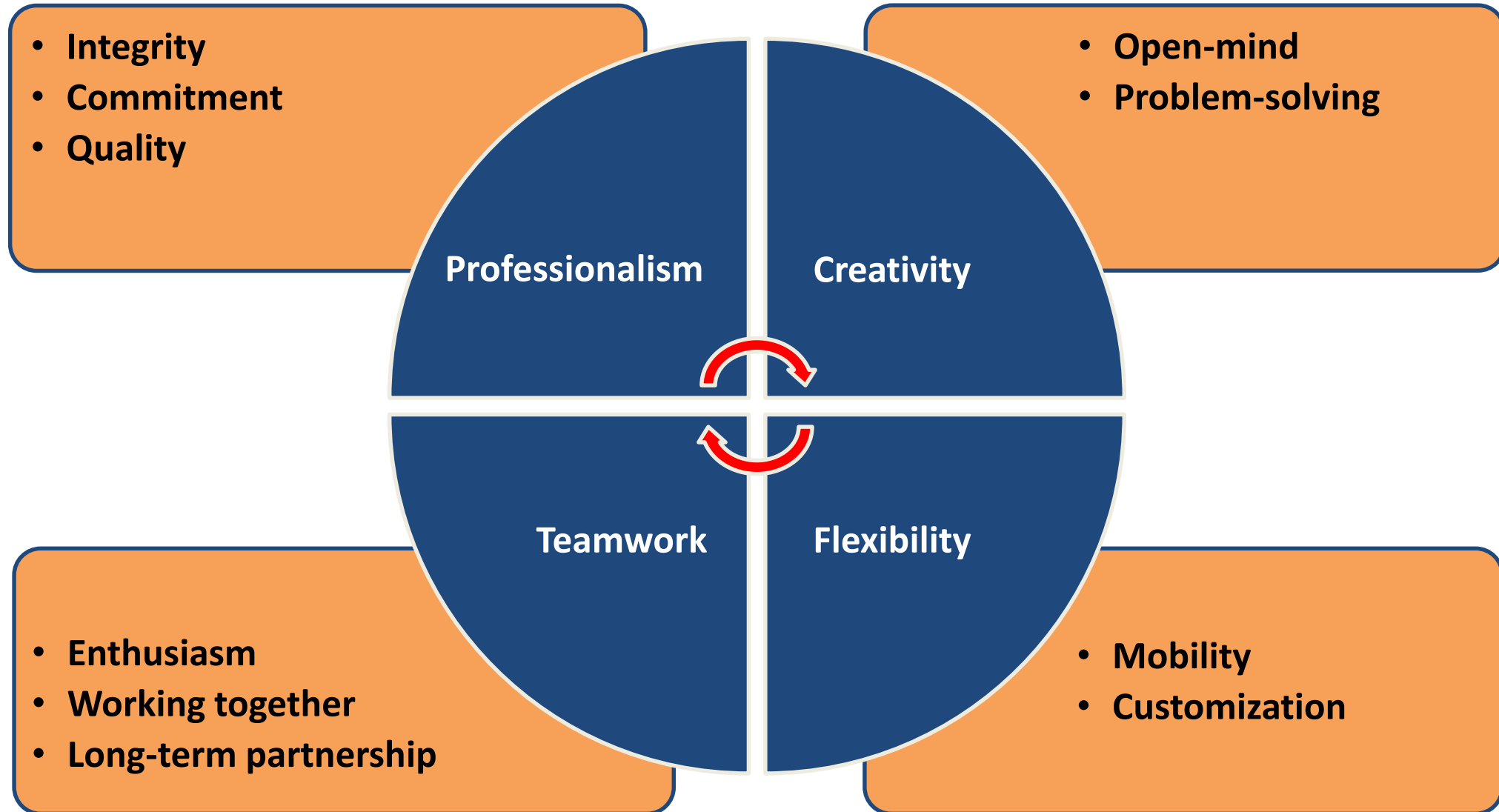
- 2003 – Start optical fiber business
- 2006 – Set up OptoMedia in Taiwan Tsing Hua University
- 2009 – Headquarter in Hsinchu
- 2013 – Clean Room in Hsinchu Tai-Yuen Hi-Tech Industrial Park

## Core Technology

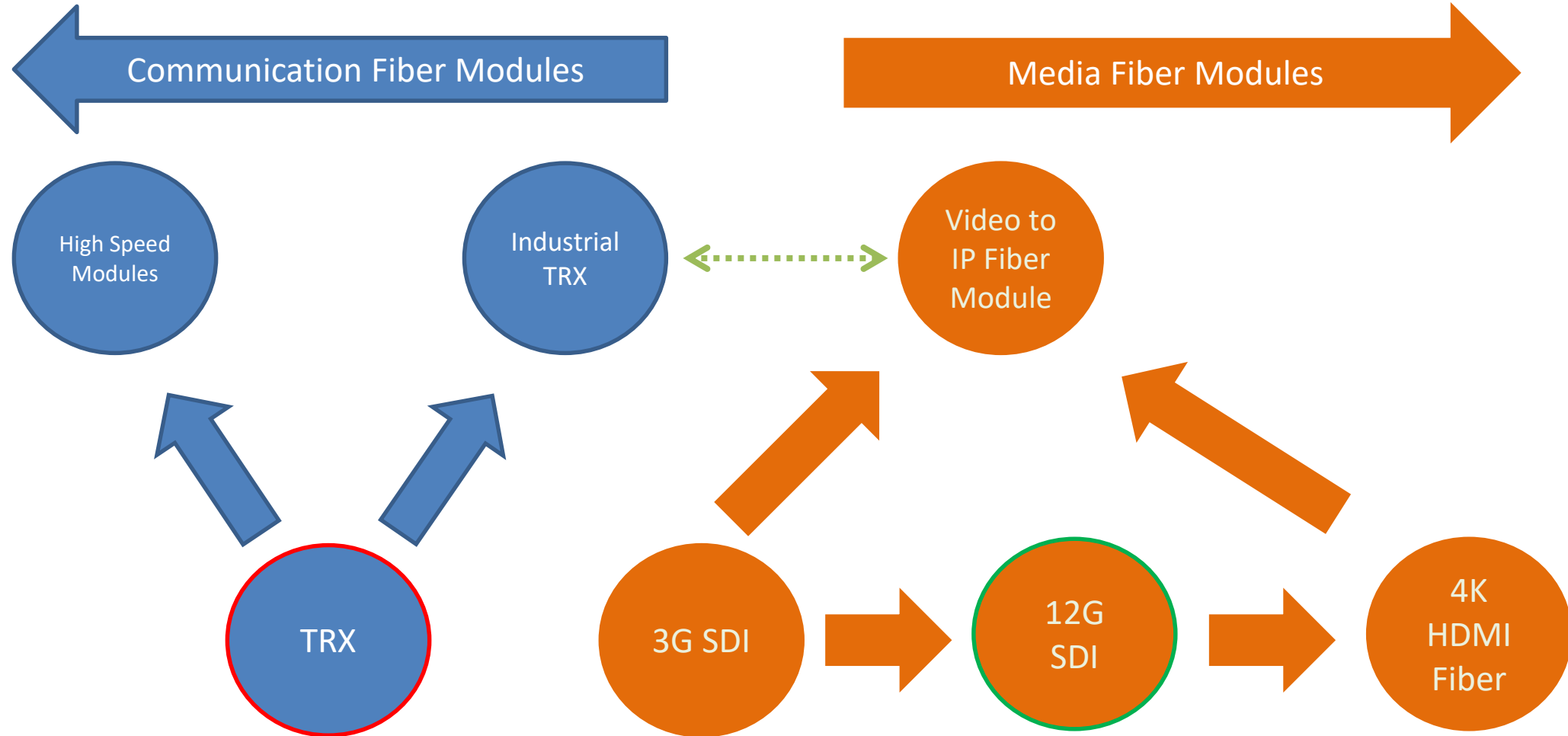
- High Speed Data modules since 2000
- CATV optical modules since 2006
- Video modules since 2008
- Video converters since 2015



# Corporate values



# OptoMedia Products Developing



# What is OptoMedia RJ45 Fiber Module



The OptoMedia newly designed RJ45 Fiber Module, which has integrated optical fiber transceiver and optical fiber converter, is able to plug and play. It is the smallest fiber converter in the world today

- **Advantages**

- **Plug and Play** without driver, making installation **easier**
- **Compact size**, designed to replace media converters and Ethernet cables
- **Cost-effectively** upgrade Ethernet to **secure** fiber connections
- High performance with **EMI protection**
- **Long-distance** connectivity (10km ↗ )



# The application of RJ45 Fiber Module



# CV4 1G POE Compact Fiber Converter

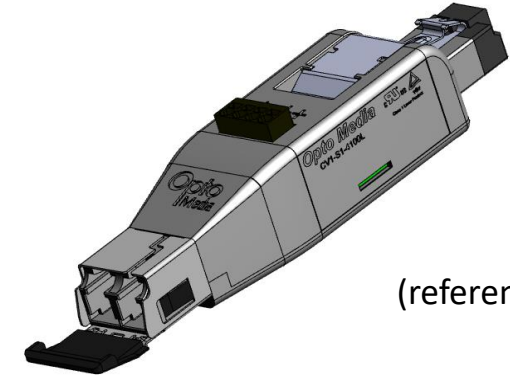
## Description

The CV4-S1-4100L provide a high level of immunity to interference and long transmission range in industrial applications by converting the 10/100/1000Mbps Ethernet interface to fiber optics (according to 1000Base-X standard).

The converters are specifically for use in PoE (power on ethernet). The Media converter is supported on NON-isolated PoE design. The RJ45 is designed by RJ45 male, the design is benefit on low-jitter, low power loss on PoE, low EMI, small size, no cable short issue.

## Features

- LC duplex connection available for single-mode or multimode fiber
- Operating temperature: -40 °C to 85°C
- Auto crossing simplifies cabling
- Link fault pass through
- Individual LEDs at each port indicate communication activity and data rate
- Supported 1310nm single-mode fiberglass
- compliant IEE802.3 10Base-T, IEEE 802.3u 100Base-TX, IEEE 802.3ab 1000Base-T, IEEE802.3z 1000Base-X
- Supported IEEE 802.3 AF/AT (ultra-low power loss)



(reference only)

General data	
Function	Converter, Ethernet 1000Base-T to fiber optic; complies with IEEE 802.3ab
Protocols	PROFINET RT/IRT
RJ45 port	10/100/1000 Base-T auto negotiation
Fiber Port	1000Base-X Full-duplex
Latency	700ns
Properties of optic port	
Total number of FO ports	1
Connector type	LC
Fiber Mode	Duplex Fiber
Link Distance (Max)	Up to 10Km
Data rate	1.25Gbps
Wavelength	1310nm
Properties of RJ45 port	
Total number of RJ45 Ethernet interfaces	1
Connection type	RJ45 male
MDI/MDIX switchover	Auto MDI/MDIX
Environmental Spec.	
Operating temperature	-40°C to 85°C
Operating Humidity (Max)	5% to 95%
Degree of protection	IP20
Power Requirements PoE	
Input Voltage	30VDC to 57VDC (IEEE 802.3 AF/AT)
Input Current (maximum)	31.25 mA @48VDC
Power Consumption (maximum)	1.5 W
Network Pin	12(+)/36(-)
Supported	PoE Over voltage Protection (OVP) PoE Over Current Protection (OCP) PoE Over Temperature Protection (OTP) PoE 2KV Surge Protection



# CV1 Industrial Converter

## Description

The CV1-S1-4100L provide a high level of immunity to interference and long transmission range in industrial applications by converting the 10/100Mbps Ethernet interface to fiber optics (100 Mbps according to FX standard).

The converters are specifically for use in electrical power substations (IEC 61000-4-5/IEEE 1613 applications). The RJ45 port offers an auto crossing function, which means it is not necessary to make a distinction between 1:1 and crossover cables.

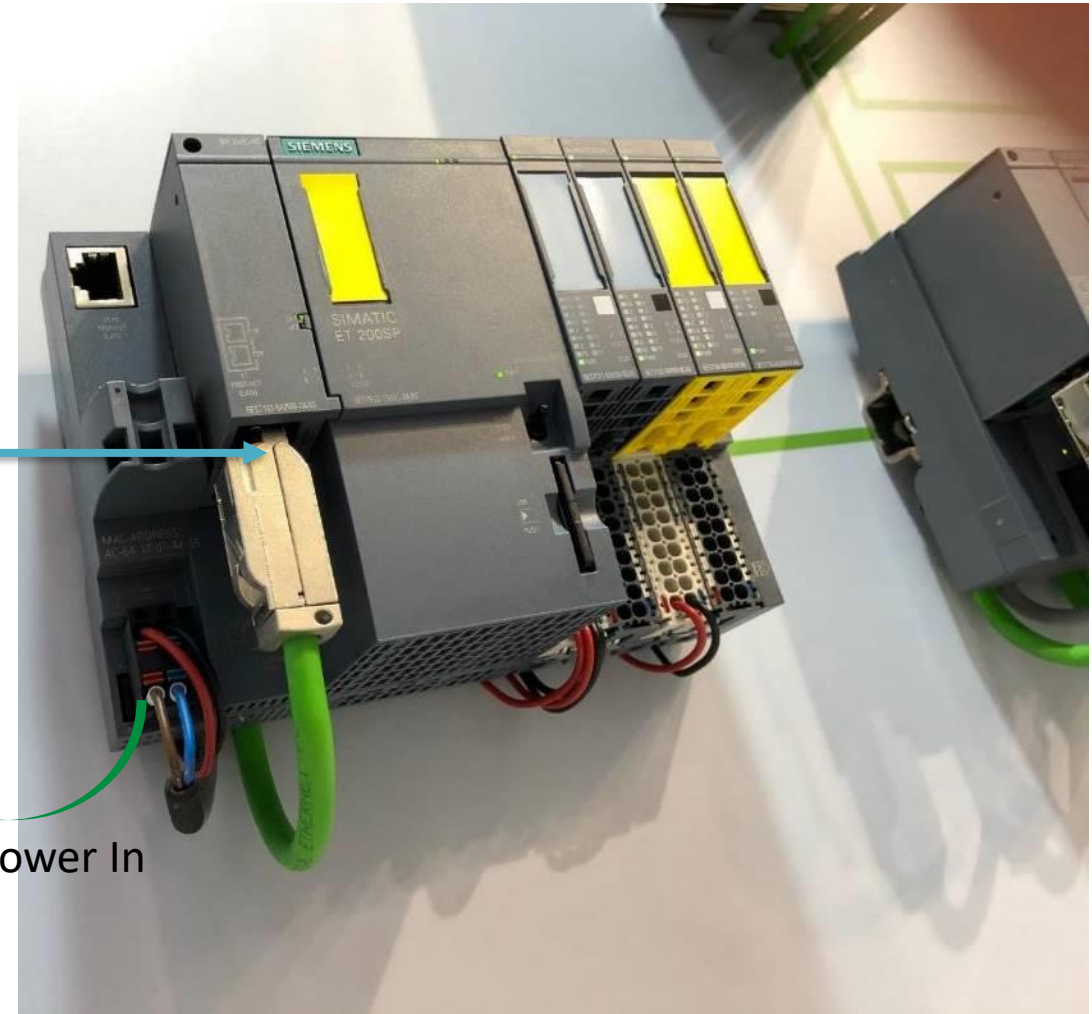
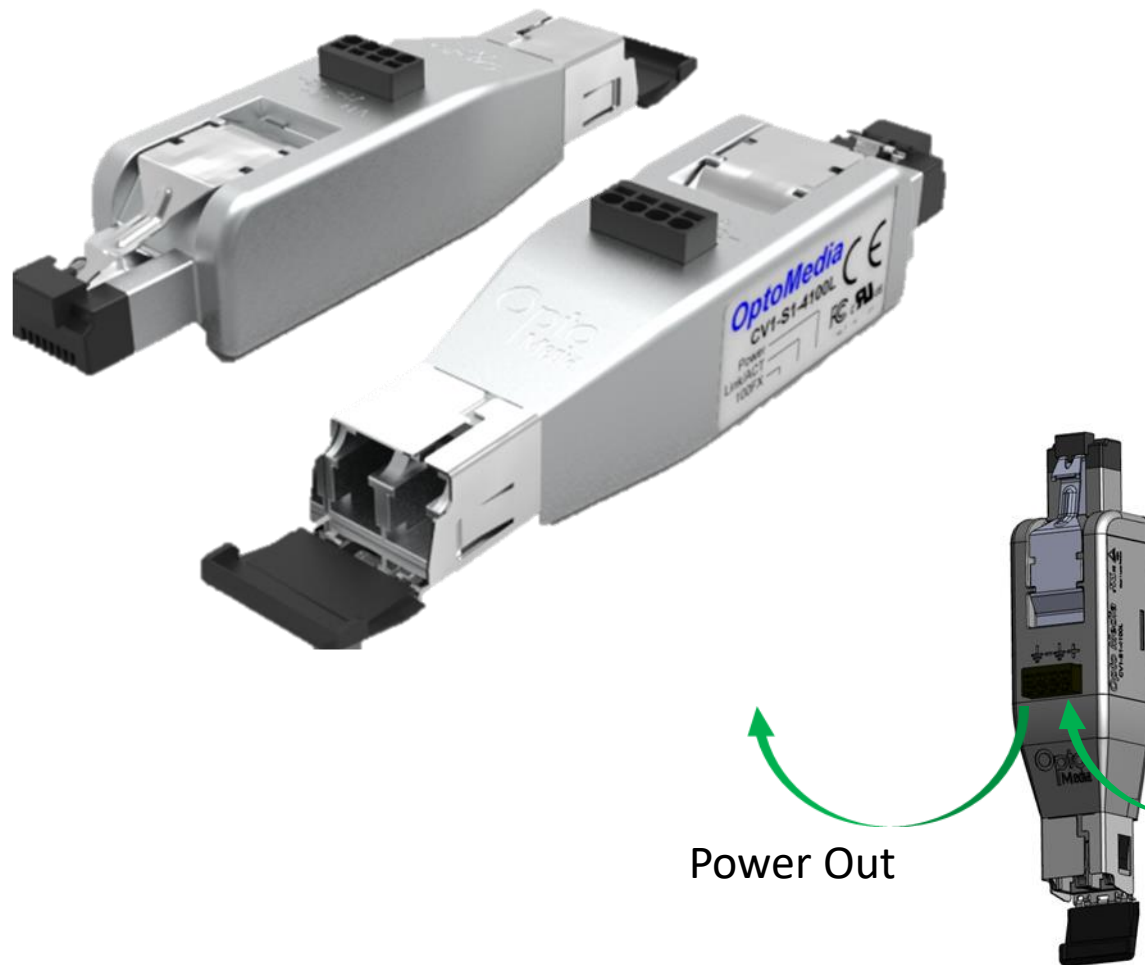
## Features

- LC duplex connection available for single-mode or multimode fiber
- Operating temperature: -40 °C to 85°C
- Auto crossing simplifies cabling
- Link fault pass through
- Individual LEDs at each port indicate communication activity and data rate
- Supported 1310nm single-mode fiberglass
- Supported redundant dual inputs, reverse polarity protection
- compliant IEE802.3 10Base-T, IEEE 802.3u 100Base-TX, IEEE 802.3 100BASE-X



General data	
Function	Converter, Ethernet 100BASE-TX to fiber optic; complies with IEEE 802.3u
Protocols	PROFINET RT/IRT
RJ45 port	10/100 Base-T auto negotiation
Fiber Port	100Base-X Full-duplex
Latency	700ns
Properties of optic port	
Total number of FO ports	1
Connector type	LC
Fiber Mode	Duplex Fiber
Link Distance (Max)	Up to 10Km
Data rate	100 Mbps
Wavelength	1310nm
Properties of RJ45 port	
Total number of RJ45 Ethernet interfaces	1
Connection type	RJ45 male
MDI/MDIX switchover	Auto MDI/MDIX
Environmental Spec.	
Operating temperature	-40°C to 85°C
Operating Humidity (Max)	5% to 95%
Power Requirements	
Typical Voltage	24VDC
Input Current	63 mA @24VDC
Power Consumption (maximum)	1.5 W

# Instead of current Industrial CAT Cable solution



# RoadMap for RJ45 Optical Fiber Transceiver

## Fiber Data Rate

1. 10 / 100 Mbps
2. 1Gbps / 100Mbps

## Power Mode

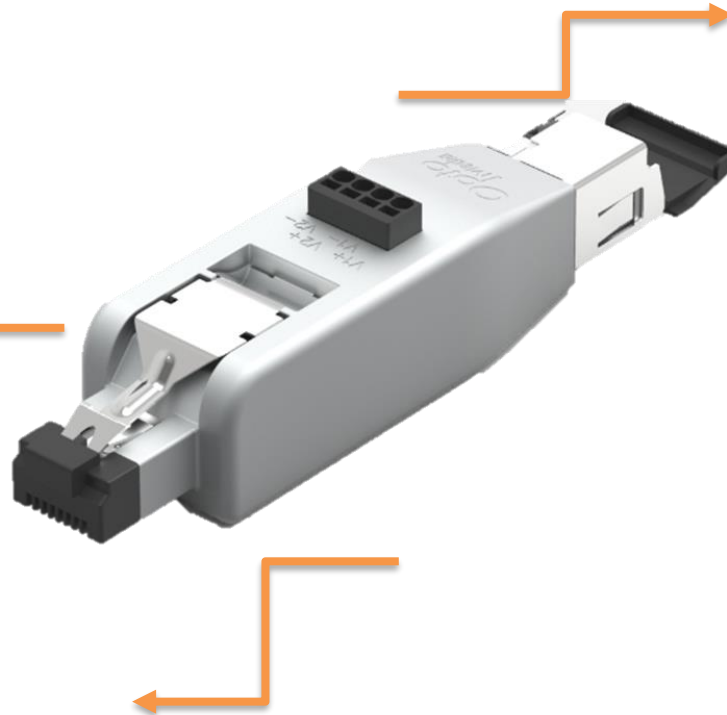
1. DC 24V with industrial power jack, with daisy chain function
2. Mini USB DV 5V
3. PoE

## Working Temperature

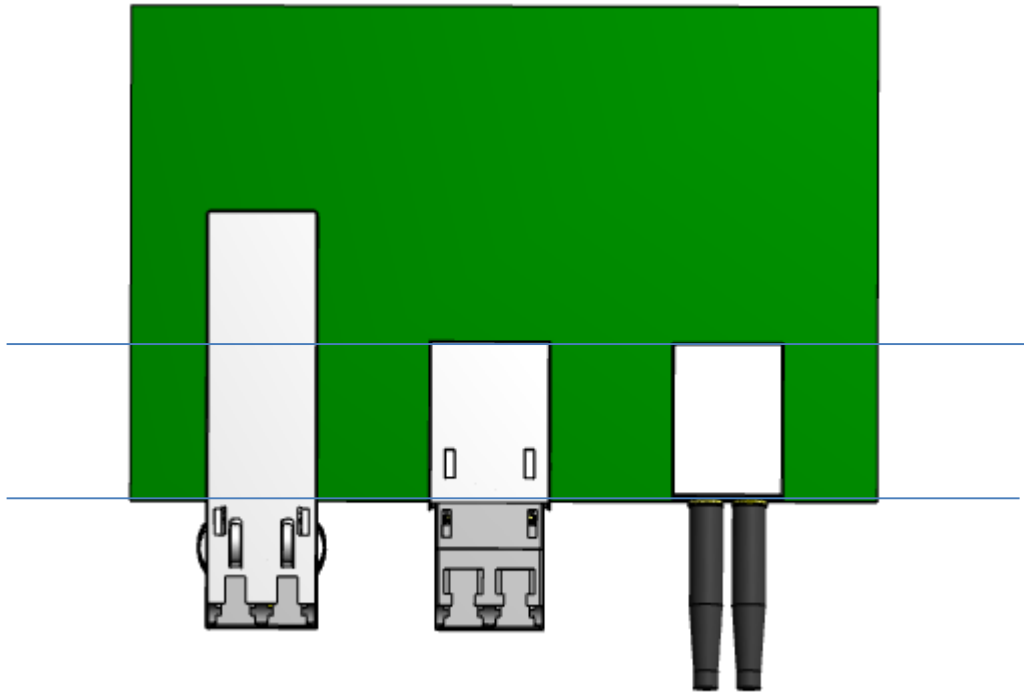
1. -40 to 85°C
2. Wilder Temperature in customized

## Distance

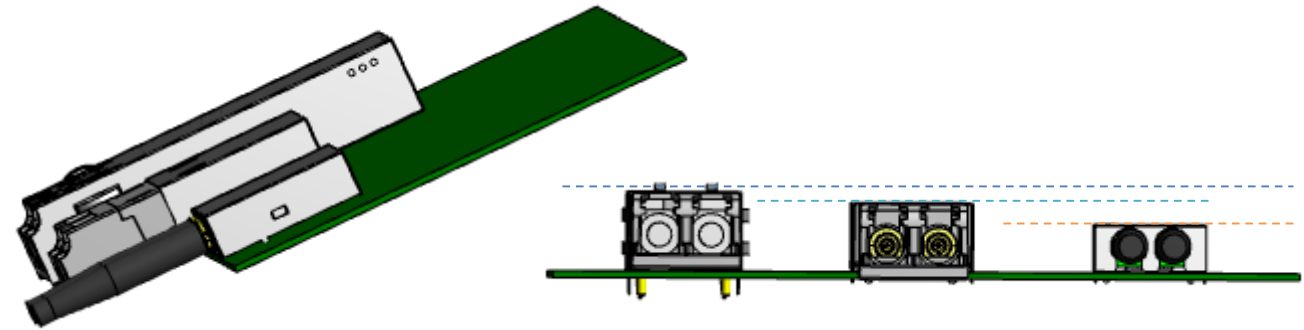
1. Standard with 10KM in Single-Mode Fiber
2. 2KM working in Multi-Mode Fiber



# The Next Generation Industrial Fiber Module



Shorter, to Save your PCB Space



Slimmer, to Slim your device height

SFF

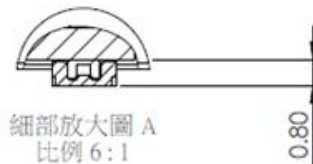
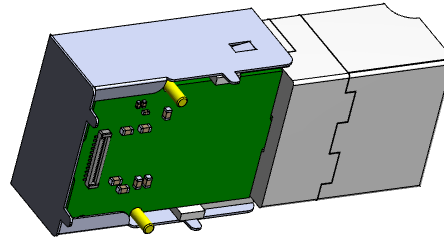
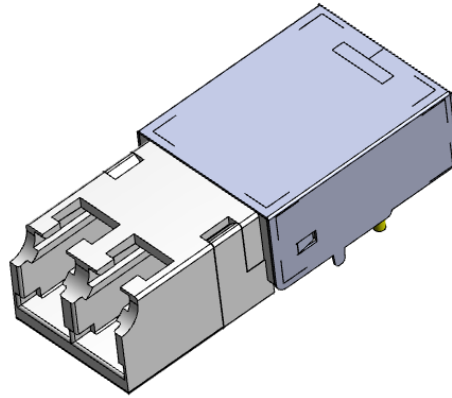
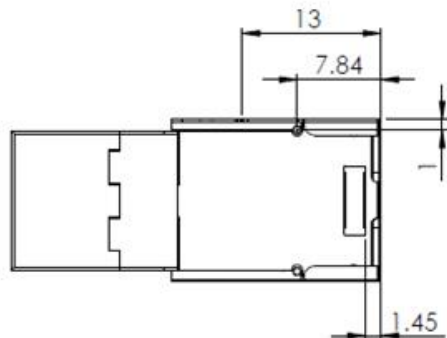
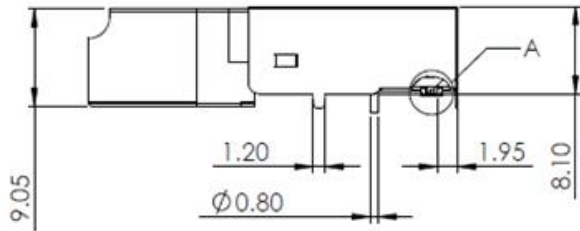
COB

COB

# OptoMedia Mini SFF 10G / 1G module

## Mechanical Dimensions (Units in mm)

Tolerance:  $\pm 0.1$

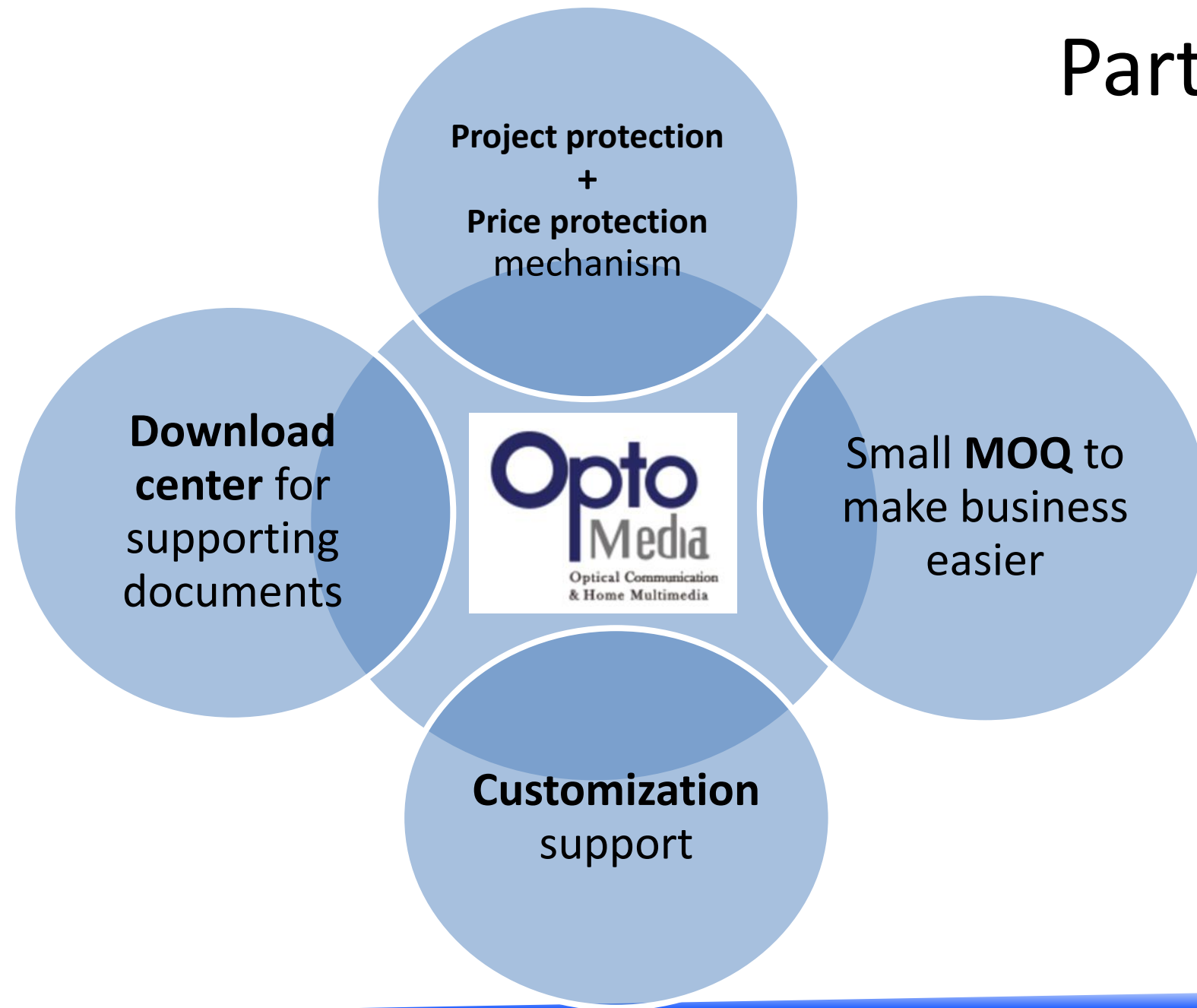


Designed for

- Small NIC
- Small industrial Camera for
  - Industrial application
  - High definition 3D sensor
  - Industrial 4.0 control system
- Low power dissipation < 0.33W
- Duplex LC connector
- Operation Temperature:
  - FP0-M3-4D33K-I: 0~+70°C
  - FP0-M3-4D33L-I: -40~+85°C
- 850nm wavelength
- Bail de-latch for easy removal from cage
- Immune to ESD, RF fields, and Vcc noise



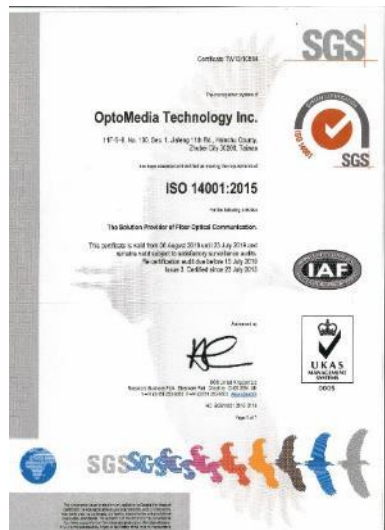
# Partnership



# Quality System

## • Safety Certificate

- IEC 60825/ 60950
- EN 60825/ 60950
- UL / CE / FDA / TUV EN 60825 / CB / CDRH / FCC/ KCC
- ISO 9001:2008, SGS
- ISO 14001: 2004, SGS
- Sony Green Partner Certification



ソニー (株) / Sony Corporation  
調達開発部門 / Procurement & Logistics Division  
グリーンパートナー事務局 / Green Partner Secretariat





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📄 MORE INFORMATION

# *We Make the Fiber Link Happen*

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