FIBERROAD®

Reliable Industrial Network Connectivity

COMPANY & PRODUCTS HIGHLIGHTS

FIBERROAD®

Fiberroad provides industrial networking solutions for reliable connectivity across industrial applications. With extensive experience in Ethernet technologies, we deliver stable and efficient network solutions for automation and infrastructure environments. Designed for long-term operations, our solutions ensure consistent performance and seamless integration in diverse deployment scenarios.

“

18 YEARS Ethernet Connectivity Expert

Global Presence & Manufacturing Capability

Fiberroad combines international business coordination in Hong Kong with in-house manufacturing and engineering resources in Shenzhen. Enabling efficient project execution, stable supply, and reliable product quality for industrial networking deployments.

Fiberroad Technology Co. Limited
Hong Kong Headquarter

R&D and Manufacturing Center
Shenzhen Fiberroad Technology Co., Limited

Engineering & Manufacturing Capability

From Design to Deployment

In-House R&D
Product development and engineering support

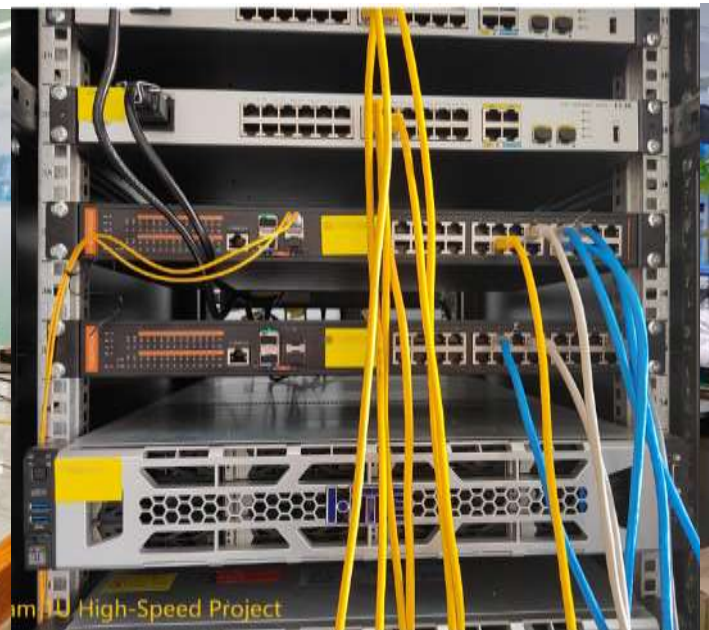
Customized Network Solutions
Application-oriented customization for industrial projects

Engineering & Manufacturing Capability

From Design to Deployment

Direct Technical Support
Direct access to engineering support for efficient technical communication

Reliable Manufacturing
Quality-assured production for long-term reliability



FIBERROAD®

Qualification Certificate

CERTIFICATE OF COMPLIANCE

Certificate Number 2024-08-01-E537333
Report Reference E537333-Q1000-1/ADCO-UL
Date 2024-08-01

Issued to: Fiberroad Technology Co., LTD
Applicant Company: 4F, Bldg 7, Longbi Industry Park, Dafa Ri
Longgang Dist.
Shenzhen, Guangdong Sheng China

Listed Company: Same as Applicant

This is to certify that representative samples of: Industrial Ethernet Switch
FR-7M3408P
FR-7M3208P

Have been investigated by UL in accord
Standard(s) indicated on this Certificate.

Standard(s) for Safety: UL 61010-1, 3rd Edition, Revised Date 2
CAN/CSA-C22.2 No. 61010-1, 3rd Editi
07-19.

Additional Standards: UL 61010-2-201, 2nd Edition, dated 201
C22.2 No. 61010-2-201, 2nd Edition, da

Additional Information: See the UL Online Certifications Director
www.ul.com/database for additional infor

This Certificate of Compliance does not provide authorization to apply the UL Mark. Only
Up Services Procedure provides authorization to apply the UL Mark.

Only those products bearing the UL Mark should be considered as being UL Certified an
UL's Follow-Up Services.

Look for the UL Certification Mark on the product.

Page 1

CTI

Verification of Conformit

The submitted sample of the following equipment has been tested for CE mark
to the following European Directive: the EMC Directive 2014/30/EU.

Applicant name & address: ShenZhen Fiberroad Technology CO., Limited
4/F, Building 7, Longbi Industry Park, Bantian, LonggangDistrict, Shenzhen, P.R. China

Manufacturer name & address: ShenZhen Fiberroad Technology CO., Limited
4/F, Building 7, Longbi Industry Park, Bantian, LonggangDistrict, Shenzhen, P.R. China

Product: Industrial Ethernet Switch

Model/Type reference: FR-7N3010, FR-7NXXXX-(*), FR-6NXXXX-(*), FR-
FR-8MXXXX-(*), FR-6MXXXX-(*), FCE305, FCE3
FCE216 (*XXXX" indicates the digits 0-9, first to
represent the number of optical ports, third throu
X represents the number of electrical ports)

Trade mark: FIBERROAD

Ratings: DC 9-56V

Order No. / Report No.: EE032QB19190

Test Standards	EN 55032:2015+A11:2020
	EN 55035:2017+A11:2020

This Verification is for the exclusive use of CTI's Client and is provided pursuant to the agreement betwee
The observations and test results referenced from this Verification are relevant only to the sample tested.
Bust does not imply that the material, product, or service is or has ever been under a CTI certification prog

Note : This verification is part of the full test report(s) and should be read in conjunction wi

CTI

Aaron Ma
Date of iss
Check

BST A RELIABLE TESTING FOR TRUST

Certificate of Compliance

Certificate NO.: BSTXD2110211013O1EC
Applicant: Fiberroad Technology CO., Ltd
Manufacturer: Fiberroad Technology CO., Ltd
4/F, Building 7, Longbi Industry Park, Bantian, Longgang Dis
Shenzhen, P.R. China
Trade Mark: Fiberroad
Product Name: Industrial Ethernet Switch
Main Test Model: FR-6N3104
Additional Model: FR-6N1102, FR-6N1006, FR-6N1104, FR-6N3102, FR-6N3204, FR-
FR-6N3216, FR-6N3006, FR-6N3016
Test Standard: EN 55032:2015
EN 61000-3-2:2014
EN 61000-3-3:2013
EN 55035:2017
As shown in the Test Report No.: BSTXD2110211013O1ER

The EUT described above has been tested by us with the listed standards and
in compliance with the council EMC directive 2014/30/EU. It is possible to use
marking to demonstrate the compliance with this EMC Directive.
The certificate applies to the tested sample above mentioned only and shall not
an assessment of the whole production.

CE

Christina Dang
Manager
Oct. 15, 2021

BST Testing(Shenzhen) Co., Ltd.

BST A RELIABLE TESTING FOR TRUST

Supplier's Declaration of Conformit

This device complies with part 15 of the FCC Rules. Operation is subject to the
condition that this device does not cause harmful interference

Certificate Summary

Applicant: Fiberroad Technology CO., Ltd
Address: 4/F, Building 7, Longbi Industry Park, Bantian, Longgang Dist
Shenzhen, P.R. China
Manufacturer: Fiberroad Technology CO., Ltd
Address: 4/F, Building 7, Longbi Industry Park, Bantian, Longgang Dist
Shenzhen, P.R. China
Test standard: FCC Part 15 Class B
Trade Mark: Fiberroad
Product Type: Industrial Ethernet Switch
Main Test Model: FR-6N3104, FR-6N3204, FR-6N3216, FR-6N3008, FR-6N3016
Certificate Number: BSTXD2110211013O1EC
Report number: BSTXD2110211013O1ER
Issuance Date: Oct. 14 , 2021
Tested by: BST Testing (Shenzhen) Co.,Ltd
Signature of Officer: Christina Dang Certification Manager

We the responsible party:
Fiberroad Technology CO., Ltd
declare that the product
Industrial Ethernet Switch

FC

Signature / Date
Name / Title

BST Testing (Shenzhen) Co.,Ltd.

BST A RELIABLE TESTING FOR TRUST

Certificate of Compliance

Certificate Number: BSTDG2110211013O1CC
Applicant: Fiberroad Technology CO., Ltd
4/F, Building 7, Longbi Industry Park, Bantian, Longgang District, Shenzhen, P.R. China
Manufacturer: Fiberroad Technology CO., Ltd
4/F, Building 7, Longbi Industry Park, Bantian, Longgang District, Shenzhen, P.R. China
Trade Mark: Fiberroad
Product Name: Industrial Ethernet Switch
Main Test Model: FR-6N3104
Additional Model: FR-6N1102, FR-6N1006, FR-6N1104, FR-6N3102, FR-6N3204, FR-6N3206, FR-6N3216, FR-6N3006, FR-6N3016
Test Standard: IEC 62321-4:2013+AMD1:2017, IEC 62321-5:2013, IEC 62321-6:2015, IEC 62321-7-1:2015, IEC 62321-7-2:2017, IEC 62321-8:2017
As shown in the Test Report No.: BSTDG2110211013O1CB

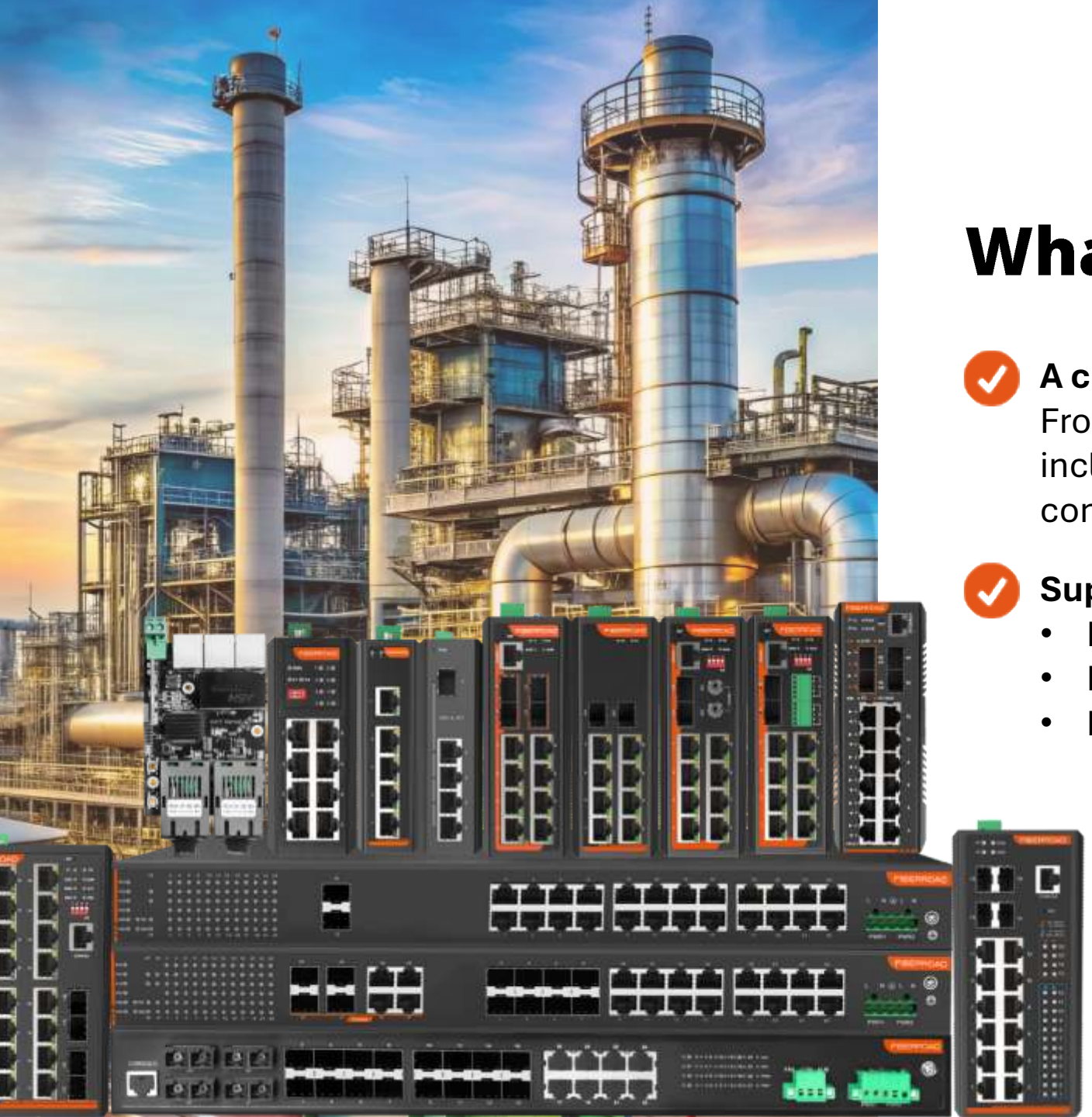
The EUT described above has been tested by us and found in compliance with the council RoHS 2 Directive 2011/65/EU Annex II (EU) 2015/863 as last amended by Directive (EU) 2017/2102. This certificate is only valid in conjunction with the test report.

RoHS

Christina Dang
Manager
Oct. 15, 2021

Dongguan BST Testing Co., Ltd

ISO 9001 CERTIFIED
ISO 14001 CERTIFIED
ISO 45001 CERTIFIED
CE
UL
UKCA
FC



FIBERROAD®

What Fiberroad Delivers?

- **A complete industrial networking portfolio** — From edge connectivity to core infrastructure, including industrial Ethernet switching, Fiber connectivity, and PoE solutions.

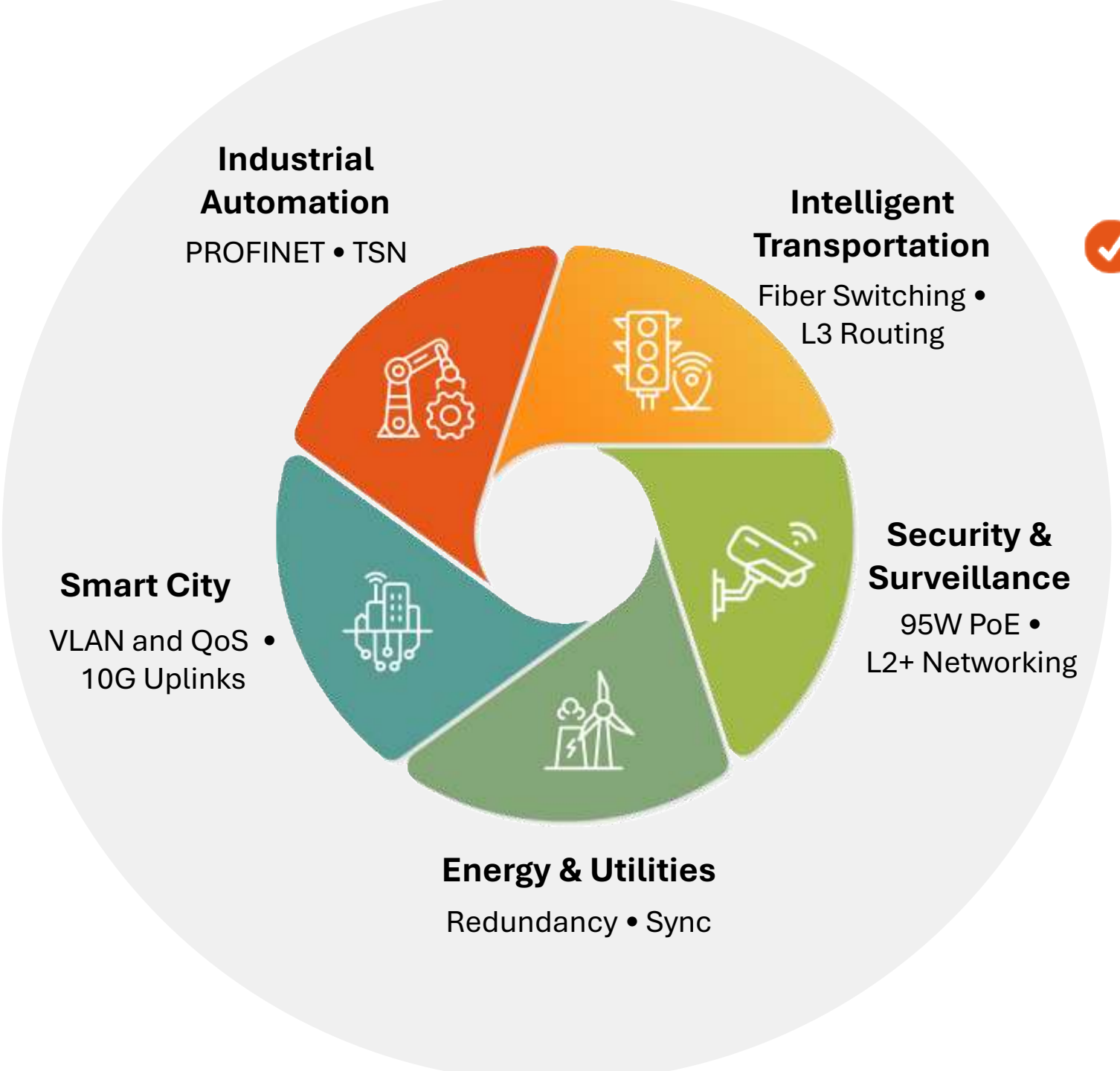
- **Supporting your network with:**
  - Flexible deployment options
  - Reliable performance in critical environments
  - Professional technical support

FIBERROAD

Industrial Grade

- Surge Protection
- -40 to 75 ℃ Wide Temperature
- IP40 Rugged Case Design
- PoE# 90W IEEE802.3bt
- ESD Protection
- Redundant Power Inputs
- Fanless Design
- Wide Range 9~56 DC Input

FIBERROAD®



- **Featuring application-oriented functions for industrial networking**

FIBERROAD®

Our Industrial Product Line

Streamline your network connectivity with Fiberroad's comprehensive range of Ethernet Product, saving you time and hassle while ensuring seamless communication across all layers.

Media Converters

Access Layer

L2+ Industrial Ethernet Switches

Distribution Layer

L3 Industrial Ethernet Switches

Core Layer

Media Converters

1

Compact
Media Converter

2

Multi-port
Media Converter

3

Industrial Ethernet
Media Converters

4

Managed Media
Converters

Product Features Highlight

1 Compact Media Converters

- Ultra compact size case; ideal for easy installation in most camera housings
- Upgrade network speed, supporting up to 10G Ethernet
- Easily customize network settings using the embedded DIP switches
- 12VDC /24VDC / 24VAC power input

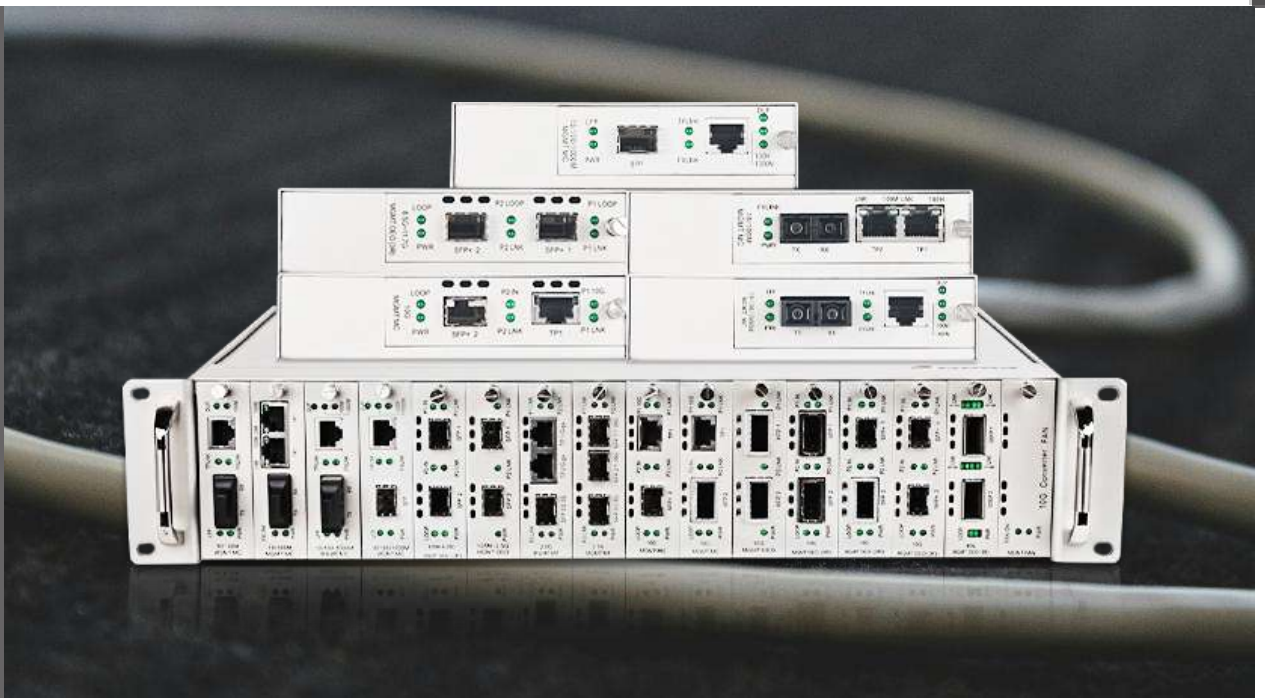
2 Multi-port Media Converters

- Ideal for organized, scalable, cost-effective network deployment
- Deliver up to 16 channels of Ethernet-to-fiber conversion in a 1U / 2U rack
- Support 10M–1G speeds, multi rate SFPs

Product Features Highlight

3 Industrial Ethernet Media Converters

- −40°C to 75°C operation
- Copper to fiber connectivity; optional PoE+/PoE++
- Rigorous vibration, drop, ESD, EFT, surge, and EMI tests



4 Managed Media Converters

- **Multiple Management Interfaces**
  Supports Console, Web GUI, Telnet, and SNMP management
- Real-Time remote monitoring of link status, power conditions, voltage and temperature, and system alarms
- Supports up to 16 hot-swappable media converter modules in a compact 2U rack-mount chassis

Industrial Ethernet Switches

FIBERROAD®

1 Industrial Automation Ethernet Switches

2 L2+ Managed Ethernet Switches

3 L3 Managed Switches

4 Managed Fiber Switches

5 Unmanaged Ethernet Switches

Product Features Highlight

FIBERROAD®

1 Industrial Automation Ethernet Switches

Synchronized IIoT Connectivity

Layer 3 Managed Switch Function

- RIPv2
- OSPFv2 and OSPFv3
- IPv4 and IPv6 Hardware Static Routing

Time Synchronization

- IEEE 1588v2 (PTP)
- IEEE 802.1AS IEEE
- 802.1 Qbu IEEE
- 802.1Qbv IEEE
- 802.1 CB

Network Security

- RADIUS and TACACS+
- SSHv2, TSLv1.2 and SNMPv3
- Access Control List

Industrial Grade

- -40 to +75℃
- IP40 Rating
- ±8kV RJ45 Surge Protection

PROFINET

Broadcast Storm Protection

Product Features Highlight

FIBERROAD®

2 Layer 2+ Managed Switches

- IEEE802.3af/at/bt
- PoE Management
- Redundant Power Inputs
- SNMP
- MQTT
- Modbus/TCP
- ERPS
- Static Routing
- VLAN

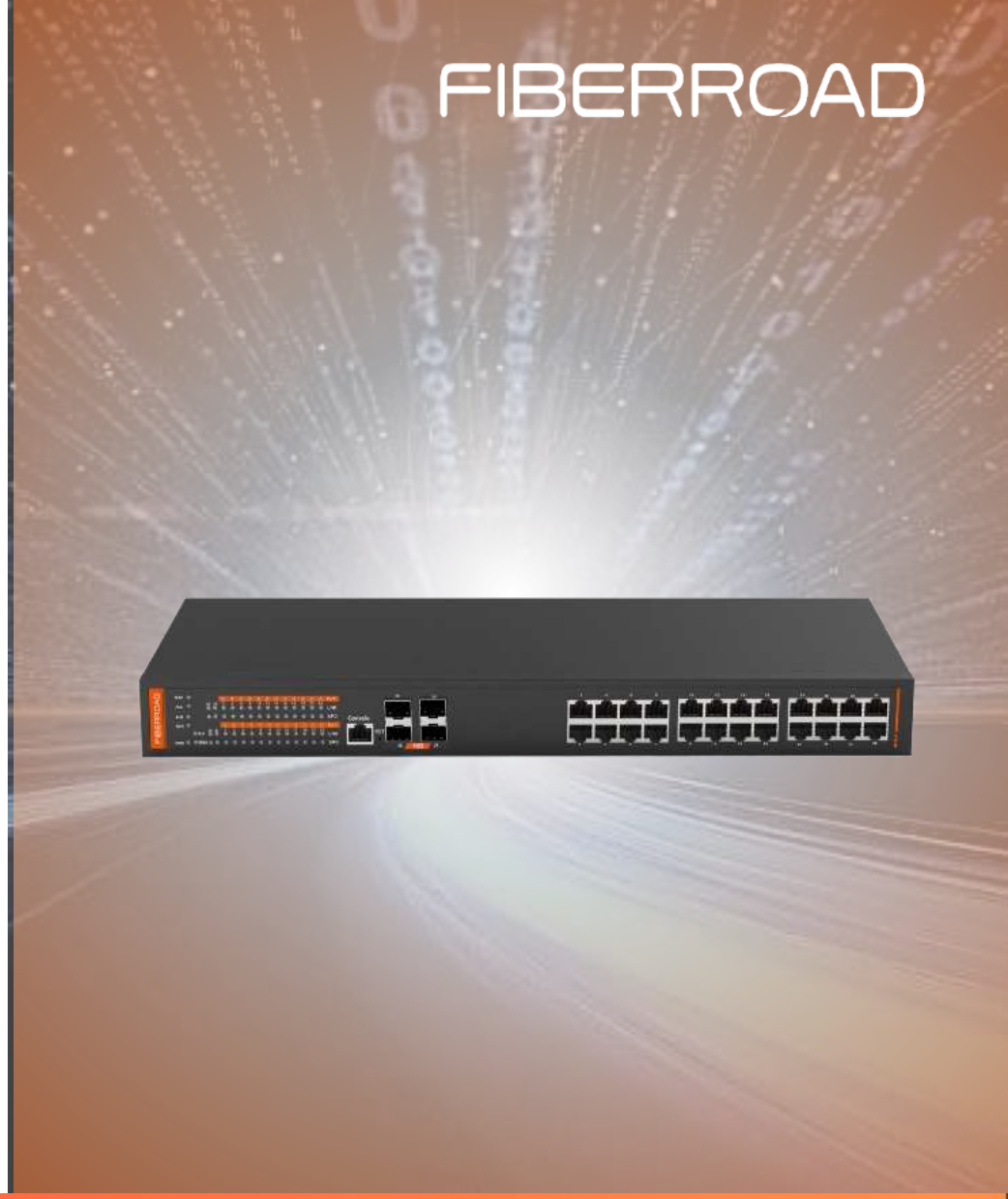
Value-added Port Functionalities

- Serial Ports
- Fiber Bypass Ports
- 24VDC Power Inputs

Product Features Highlight

3 L3 Managed Ethernet Switches

- ERPS
- 4K VLANs
- IPv6 Static Routes
- Multicast Optimization
- Robust QoS
- 802.1X
- ACLs
- SNMP/Web/ CLI Management

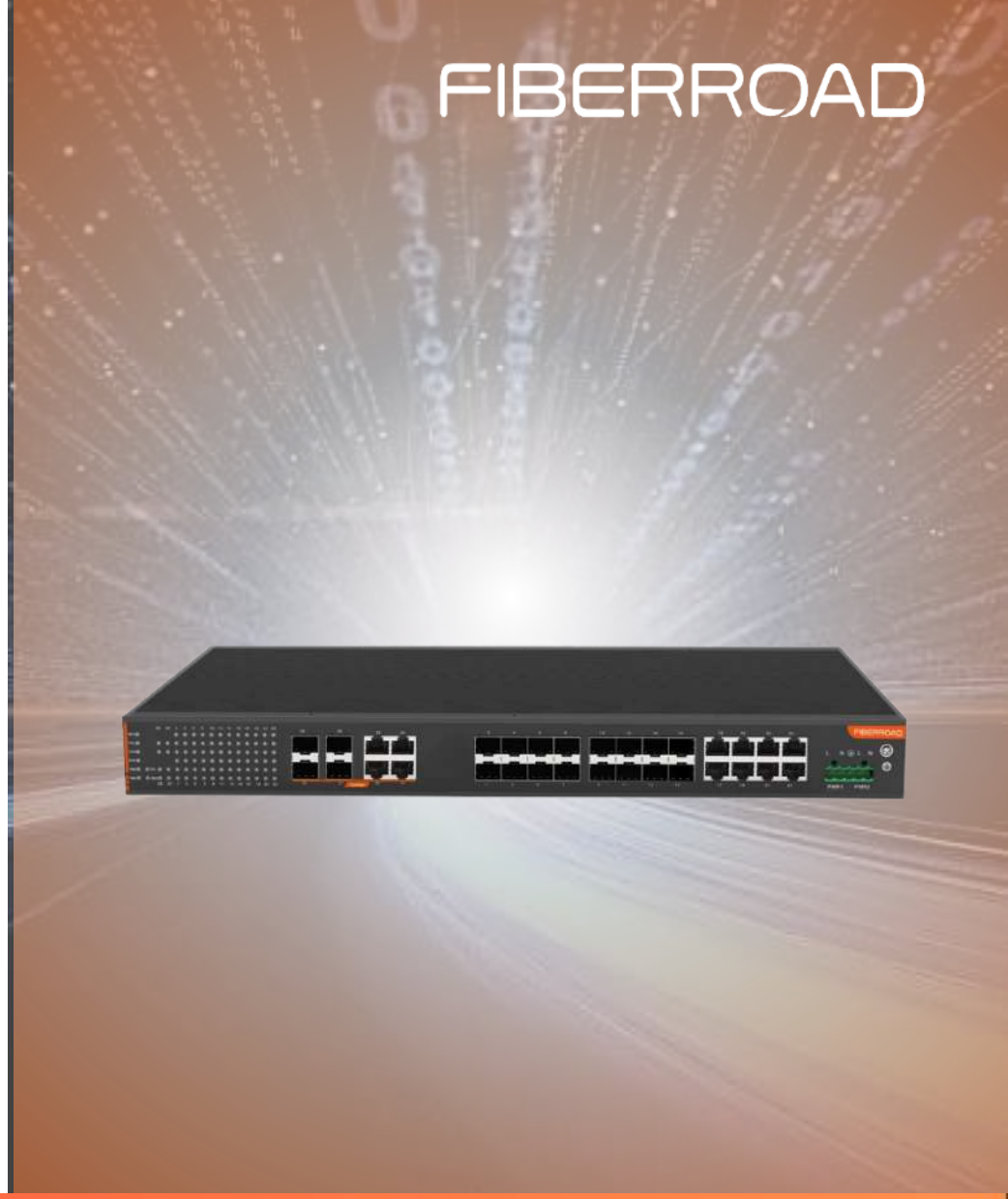


Product Features Highlight

4 Managed Fiber Switches

Ideal for data centers, surveillance backbones, industrial automation, and campus fiber rings

- High Fiber Port Density
- ERPS
- L2+/L3 Capabilities
- Robust QoS
- IPv4/IPv6
- VLAN/QinQ



Product Features Highlight

FIBERROAD®

5 Unmanaged Ethernet Switches

VLAN Isolation

Isolates PoE ports to enhance network security

QoS Priority

Prioritizes video and VoIP traffic for real-time performance

Quick Access DIP Switch

- VLAN
- Long Reach PoE
- QoS
- PD Auto Reboot

Unmanaged Ethernet Switches

Long Reach PoE

Extends PoE transmission up to 250 meters

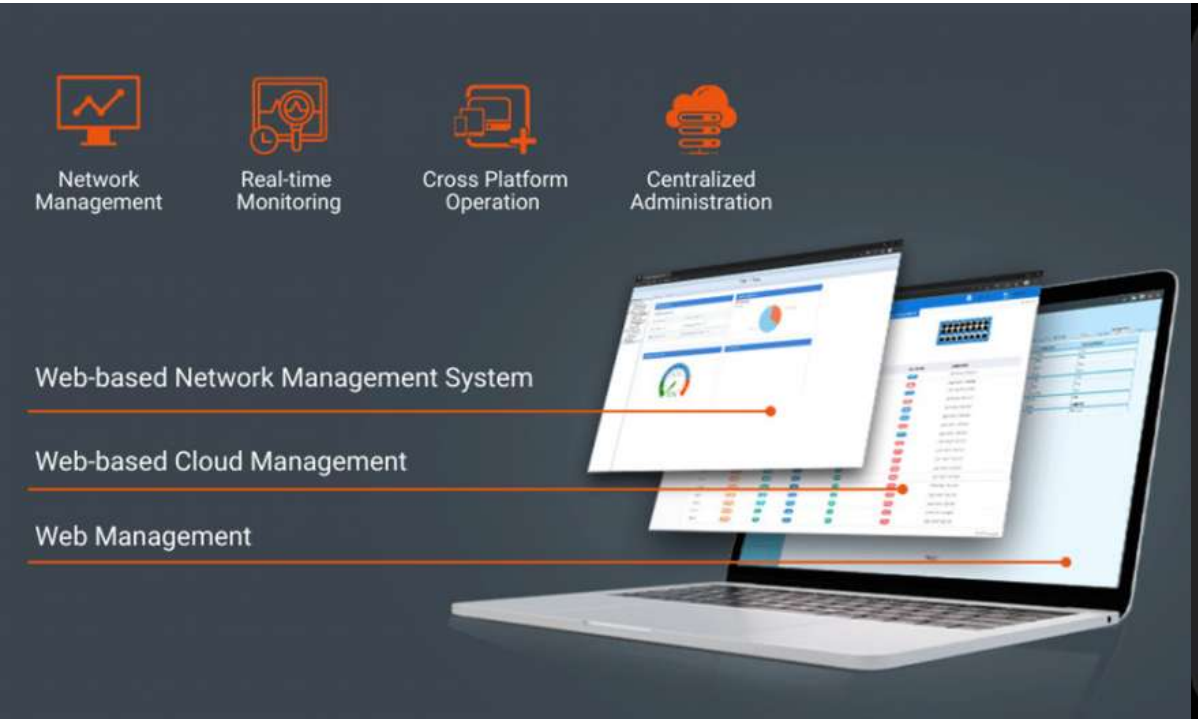
PD Auto Reboot

Automatically reboots unresponsive PoE devices

Product Features Highlight

Web-based Cloud Management Platform

- Real-time Centralized Management of all managed network switches
- Remote access to network through web-based platform
- Full management features available



Product Features Highlight

FIBERROAD®

PoE Peripherals

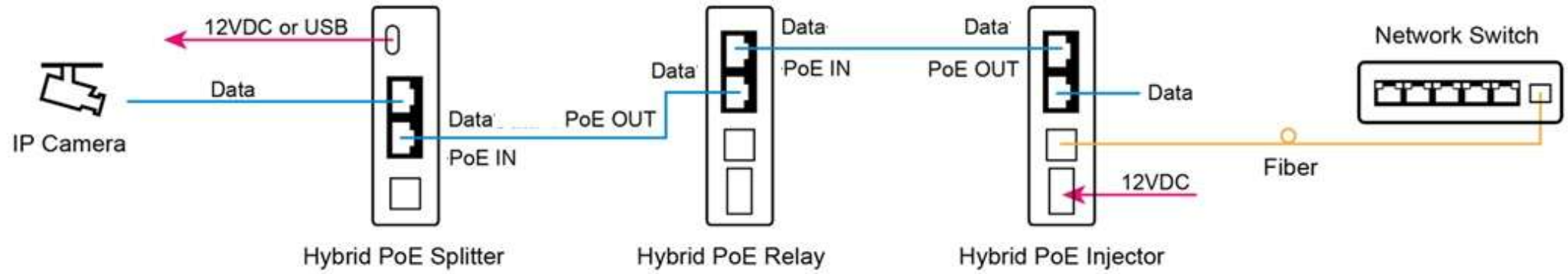
Extend PoE Distance
Increase PoE transmission range beyond standard Ethernet limitations.

Power Non-PoE Devices
Convert PoE power for devices without built-in PoE support.

Simplify Installation
Deliver power and data through existing Ethernet infrastructure.

Flexible Deployment Options
Support PoE injection, power conversion, and distance extension for various applications.

Application Diagram



Upcoming Product Upgrade

FIBERROAD®

The ISW Series is designed to meet ESD level 4 & EFT level 4

- ✓ More compact size
- ✓ RJ45 ports two-sided orientation
- ✓ Housing grooved 3D design
- ✓ Dedicated console port
- ✓ Separated alarm ports and VDC input ports
- ✓ Status LED separate from RJ45 port
- ✓ RJ45 ports fully enclosed

Upgraded Warranty and Repair Policy

FIBERROAD®

Our Warranty for Industrial Products is up to 5 Years.

Advance Warranty Policy

Replacement First, Inspection Later.

Project References

Traffic Monitoring and Operations on Hanoi-HCM Expressway, VIETNAM

Application Purpose:

To establish a reliable traffic monitoring and operations network for the **North–South Expressway** in Vietnam, supporting real-time surveillance, roadside device connectivity, and stable communication across long-distance highway infrastructure.

Products Provided:

Industrial **24VDC PoE** are provided for fiber network connectivity along the expressway, and for centralized network management for various **monitoring** and **data communication ELV** systems.

Project References

Singapore PSA Port Monitoring project, SINGAPORE

Application Purpose:

To upgrade monitoring and operations network for the **TUAS Port** in Singapore, supporting real-time surveillance and signals across port facilities.

Products Provided:

Industrial grade media converters are provided for each IP device with dedicated fiber cable. **Hardened spec** ensure seamless operation in **hot weather** in tropical climate, and withstand **high humidity** in seaside environment.

Project References

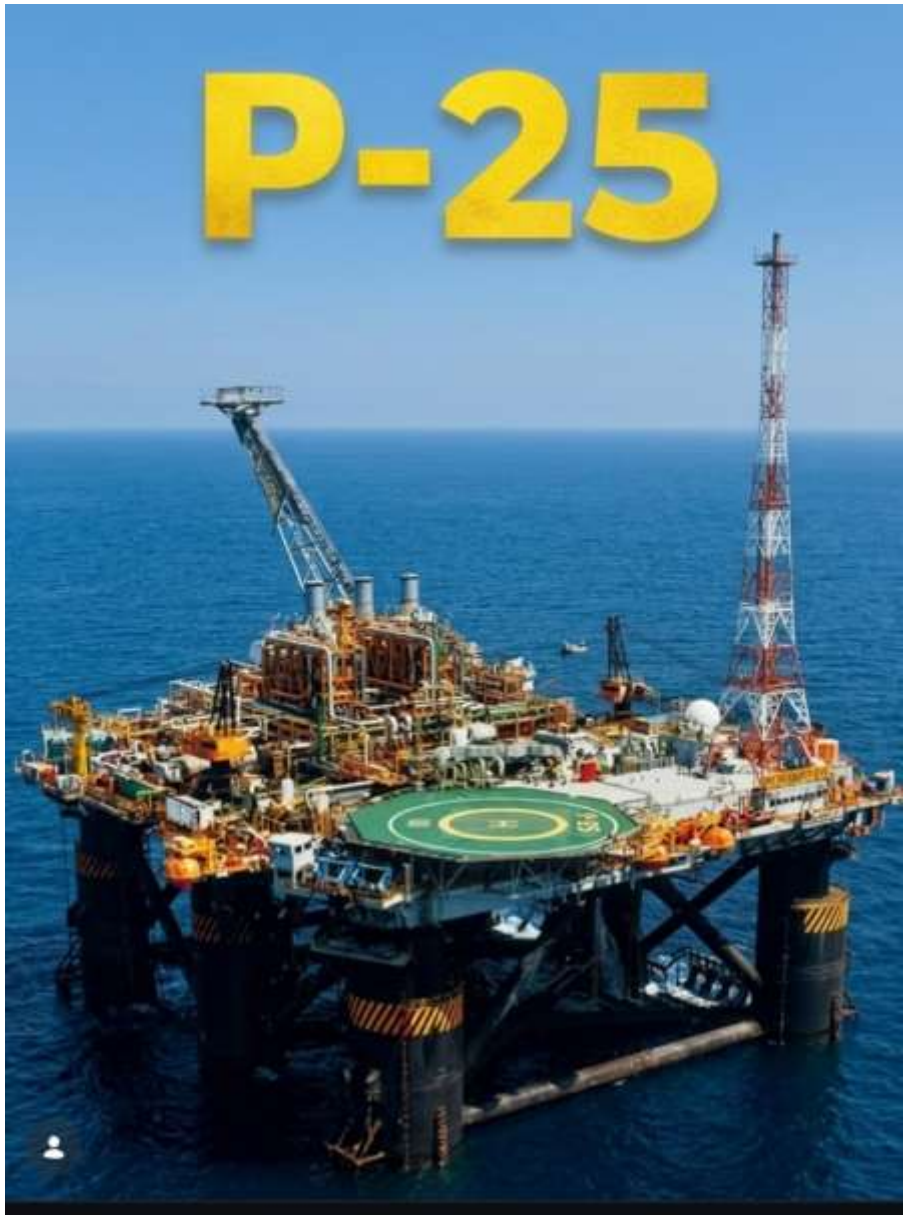
Petrobras FPSO Telco & Surveiilance project, SINGAPORE/BRAZIL

Application Purpose:

To upgrade the **HH LAN** (Hull Local Area Network) on in P-25 FPSO, owned by Petrobras, for its surveillance and telecommunication system connectivity.

Products Provided:

Industrial grade PoE++ media converters are provided for HH LAN. **Hardened spec** ensure seamless operation in hot and humid offshore condition. PoE++ provides up to **90W PoE output** to power up various IP powered devices.



Project References

Broadcast infrastructure in various Ministry of Sports and Youth club venues, QATAR

Application Purpose:

To support **high-bandwidth broadcast** transmission with long-distance fiber connectivity, low-latency communication, and space-efficient deployment for multimedia and entertainment infrastructure.

Products Provided:

Compact **10G Ethernet fiber transmission** solution enabling high-speed, low-latency network communication, stable signal extension, and flexible deployment in space-limited broadcast environments.

Project References

Electrical Grids Monitoring and Control, ITALY

Application Purpose:

Remote **surveillance** and **power system** operation in space-limited environments.

Products Provided:

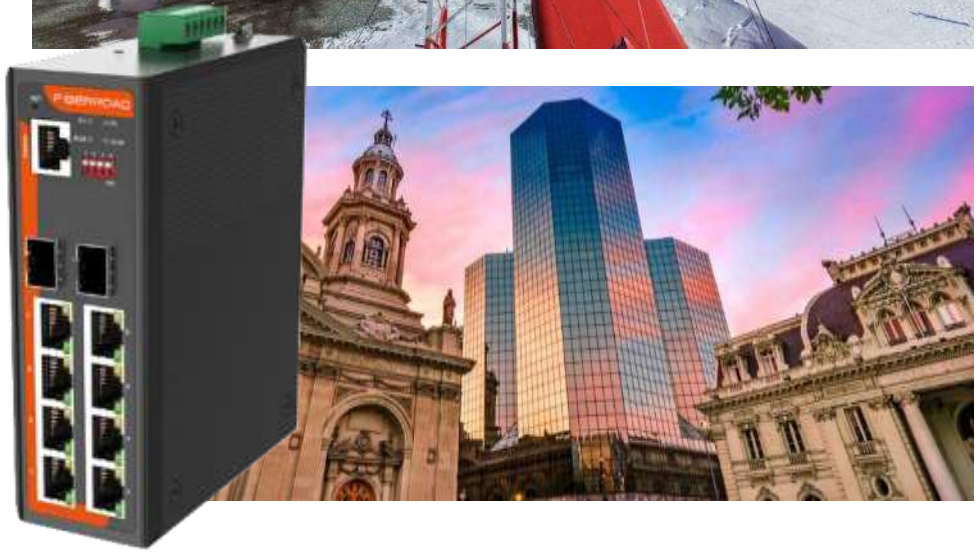
The Compact Medica Converter with ultra-small form factor design, allowing flexible installation **inside cameras housing**, and with 12VDC, 24VDC or 24VAC power input for **flexible inst**allation.

Project References

5G Network Deployment Project, CHILE

Application Purpose:

Challenges included simplified cabling for rapid deployment, stable outdoor operation in harsh environments, and reliable remote management across distributed telecom infrastructure.



Products Provided:

With IEEE 802.3af/at support, wide temperature design, ERPS redundancy, and L2/L3 management capabilities, enabling simplified 5G small cell deployment, stable fiber connectivity, and centralized remote network management across distributed telecom sites.

Project References

Intelligent Transportation Network for Smart Bus, PORTUGAL

Application Purpose:

Stable network connectivity for IP cameras, passenger information systems, and 4G WiFi devices, while enabling reliable remote management and wireless monitoring of connected devices

Products Provided:

enabling real-time fleet monitoring, passenger information services, remote device management, and stable surveillance connectivity for smart bus transportation systems operating in demanding mobile environments

FIBERROAD®

	Fiberroad	OTS
Product Range	**250+ Models** Comprehensive	120+ Models Limited
Pricing	**Competitive** 30 to 40% Lower	Premium Higher Price
Lead-time	**Fast Delivery** 1–2 Weeks (70% within 1 week)	Longer 2–3 Weeks at least
Customization	**Flexible** Tailored hardware and software options	Fixed Standardized product configurations

FIBERROAD®

Thank you

www.fiberroad.com

E-mail: marketing@fiberroad.com

Tel: +852 92546058

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14-20 Wing Yip Street, Kwai Chung, N.T., Hong Kong