Raritan
A brand of **legrand**

SMALL, COMPACT DESIGNED FIBER-TO-ETHERNET
MEDIA CONVERTER

UPGRADE YOUR ETHERNET TO FIBER CONNECTIVITY FOR KVM, IPDU, OR IPCS

Legrand's UTP-FIBER1G-USB fiber-to-Ethernet media converter is specifically designed for electrical power substation (IEC 61000-4-5). It provides a high level of interference immunity and extended transmission range (up to 10km) in industrial applications by converting the 1000Mbps Ethernet interface to fiber optics (1000Mbps according to 1000Base-X standard).

The small, plug-and-play converter dongle with LC duplex connector driven by USB 3.0 / USB 2.0 provides flexibility to upgrade ETHERNET to FIBER OPTICAL in places with no industrial power supply or power over ethernet (PoE) are present. Its RJ45 port (male type) offers an auto crossing function, which means it is not necessary to distinguish between 1:1 and crossover cables.

APPLICATIONS

- Connectivity for long-distance and interference immunity with high security

- Control Center, Server Room, Office, Surveillance, Smart Building, Factory, Signaling System, Digital Signage, and Car Parking System

- Government, Telecommunication, Media, Medical, Security, Education, and Enterprise

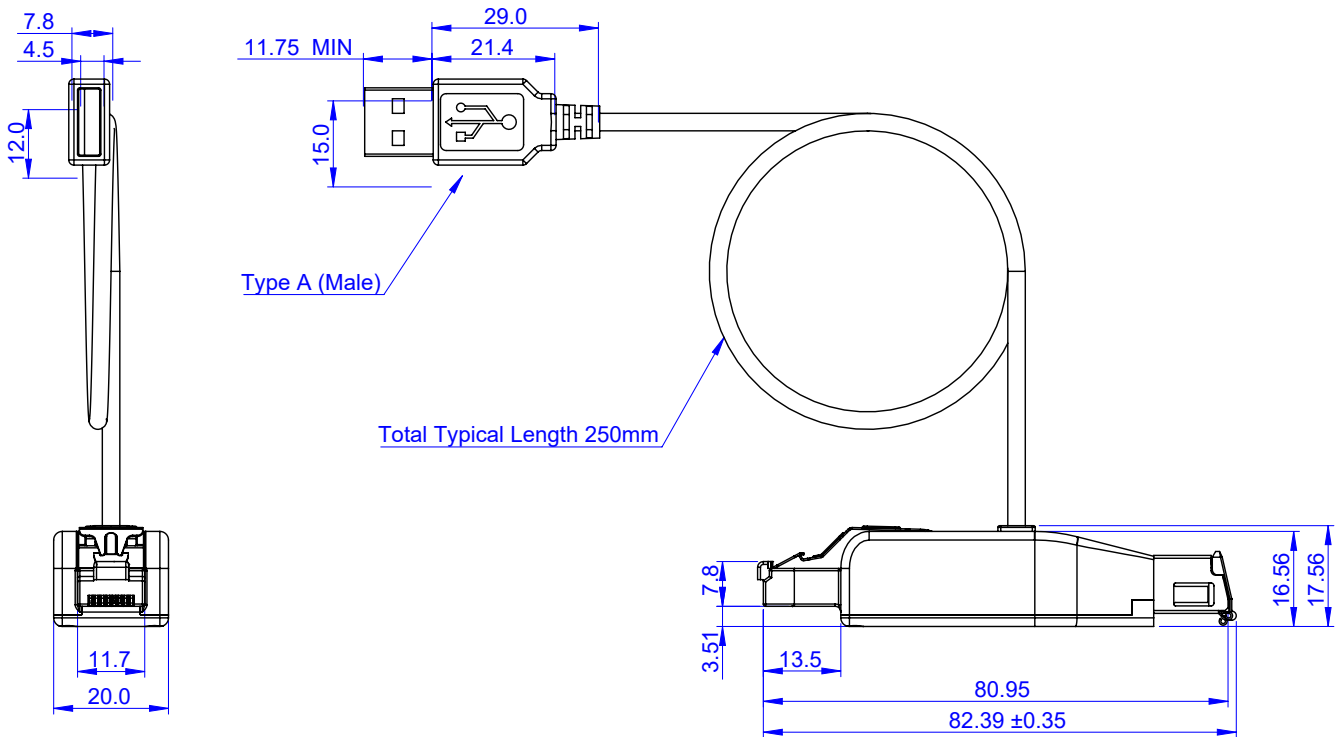

Feature and Benefits

- IEEE 802.3 1000Base-T, IEEE 802.3u 1000BASE-X compliant

- IEC 61000-4-5 (surge immunity) compliant

- Connector: LC duplex

- Data rate: 1000Mbps

- Wavelength: 1310nm (single-mode) Operating temperature: 0˚C~55˚C

- Power input voltage range: 4.5V~5.5V

- Power dissipation < 2.5W

- Support distance: up to 10km for Single-mode fiber up to 800m for Multi-mode fiber

- Both Single-mode and Multi-mode fiber supported

- Link Fault Pass-Through (LFP) supported

- Auto dust cover

- Auto crossing simplifies cabling (MDI/MDIX)

- Individual LEDs indicate power and communication status

- CE/FCC/UKCA/VCCI compliant

- RoHS and REACH compliant
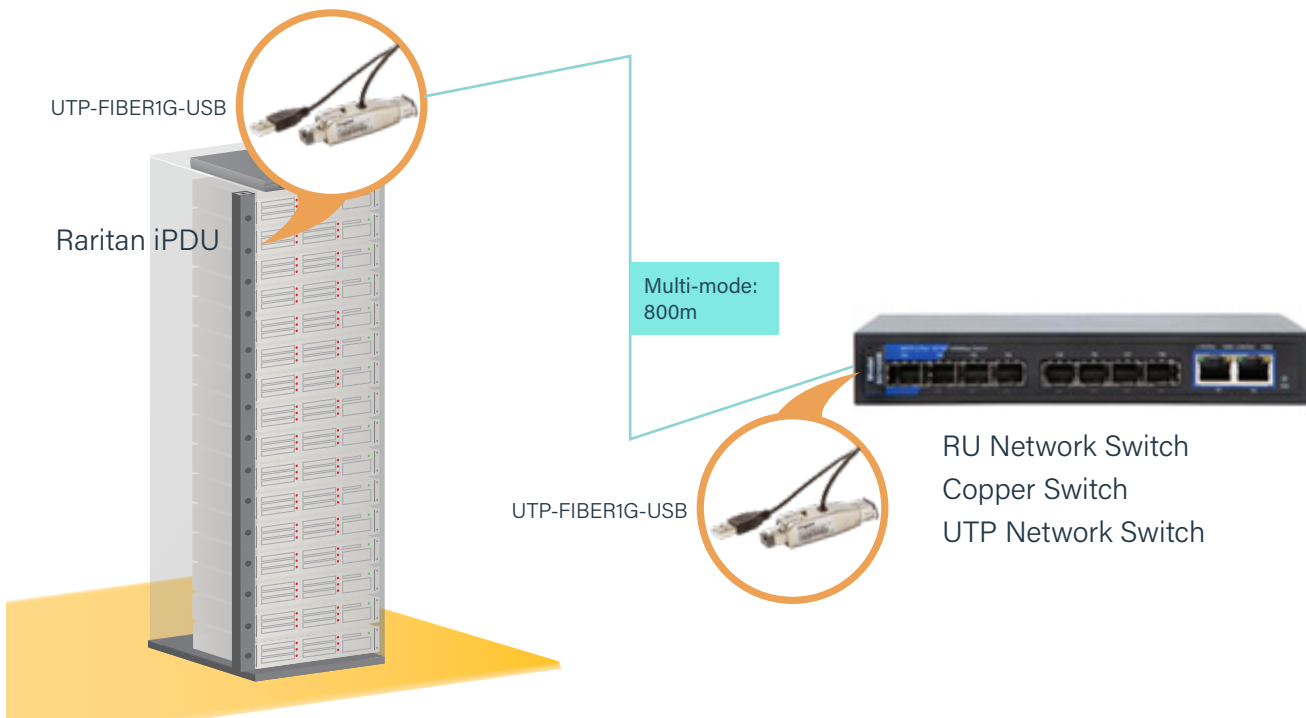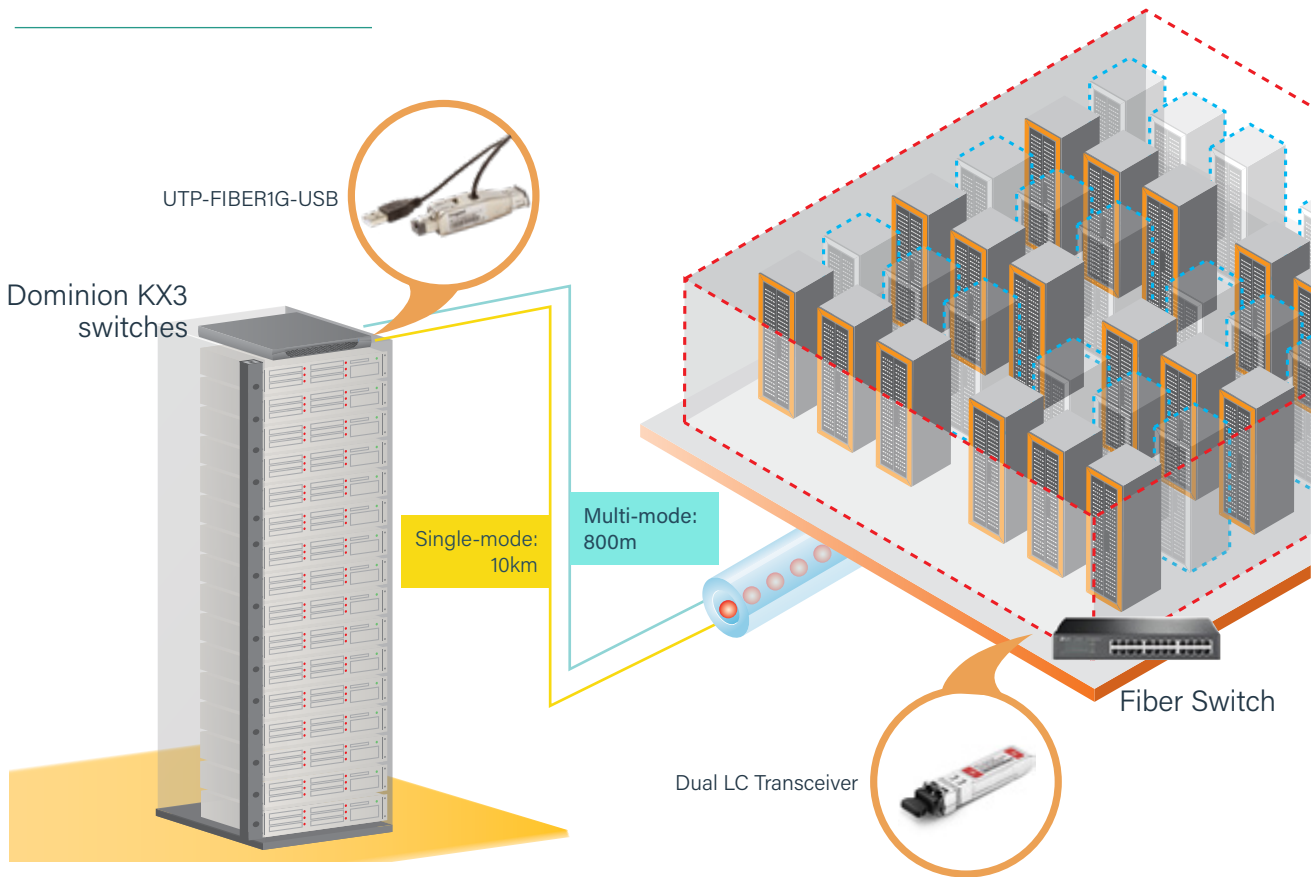
LED PANEL INDICATION

Description	Color	Status	Function Description
Power	Green	On	Module on
	No light	Off	Module off
Link/ACT	Green	On	1000Mbps
	Green Blinking	On	Activity
	No light	Off	Disconnected
Fiber	Blue	On	Connected
	No light	Off	Disconnected

Class 1 Laser Product Complies With
21 CFR 1040.10 and 1040.11

Power
Link/ACT
Fiber

DIMENSIONS

7.8
4.5
12.0
11.7
20.0

11.75 MIN
29.0
21.4
15.0

Type A (Male)

Total Typical Length 250mm

7.8
3.51
13.5
80.95
82.39 ±0.35
16.56
17.56

CONNECTION DIAGRAM

UTP-FIBER1G-USB

Dominion KX3 switches

Single-mode: 10km

Multi-mode: 800m

Fiber Switch

Dual LC Transceiver

UTP-FIBER1G-USB

Raritan iPDU

Multi-mode: 800m

RU Network Switch
Copper Switch
UTP Network Switch

UTP-FIBER1G-USB

SPECIFICATIONS

General Specifications

Function	Fiber Converter dongle
RJ45 port	1000 Base-Tx Auto negotiation (IEEE 802.3u)
Fiber Port	1000 Base-X Full-duplex (IEEE 802.3u)

Properties of optic port

Total number of FO ports	1
Connector type	LC
Fiber Mode	Duplex Fiber
Link Distance (Max)	Up to 10Km for Single-mode fiber Up to 800m for Multi-mode fiber
Data rate	1.25Gbps
Wavelength	1310nm
Optical Output Power Range	-1 ~ -5 dBm
Optical Receive Sensitivity	-21 ~ -3 dBm

Properties of RJ45 port

Total number of RJ45 Ethernet interfaces	1
Connection type	RJ45 male
Data rate	1000Mbps
MDI/MDIx switchover	Auto MDI/MDIX

Environmental Spec.

Operating temperature	0˚C~55˚C
Operating Humidity (Max)	5%~95%
Degree of protection	IP20

Power Requirements

Connector type	USB 3.0 / USB 2.0 Type A	
Power Consumption	typical	2.1 W
	maximum	2.5 W

Physical Characteristics

Housing	Metal
Dimension	82.39(L)*20(W)*17.56(H) mm
Weight	50g

Standards and Certifications

Shock and Vibration	CNS 10033
Certifications	CE/FCC/UKCA/VCCI
Green product	RoHS and REACH

Raritan.com/ap/Fiber-USB

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