Industrial 4-Port 10/100/1000T + 2–Port 100/1000X SFP Ethernet Switch

IGS-620TF

75℃ -40℃

Full Ports Gigabit

100FX 1000X Fiber Optical

Redundant Power

IP Code 30

DIN Rail

www.planet.com.tw

Presentation Outlines

◆ **Product Overview**

◆ **Product Benefits**

◆ **Product Features**
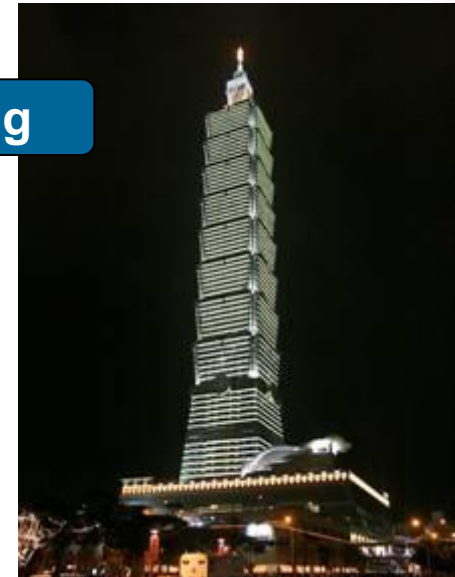
◆ **Applications**

◆ **Appendix**

IGS-620TF

Product Overview

◆ **Environments of Industrial Products**

Factory

Building

Transportation

Product Overview
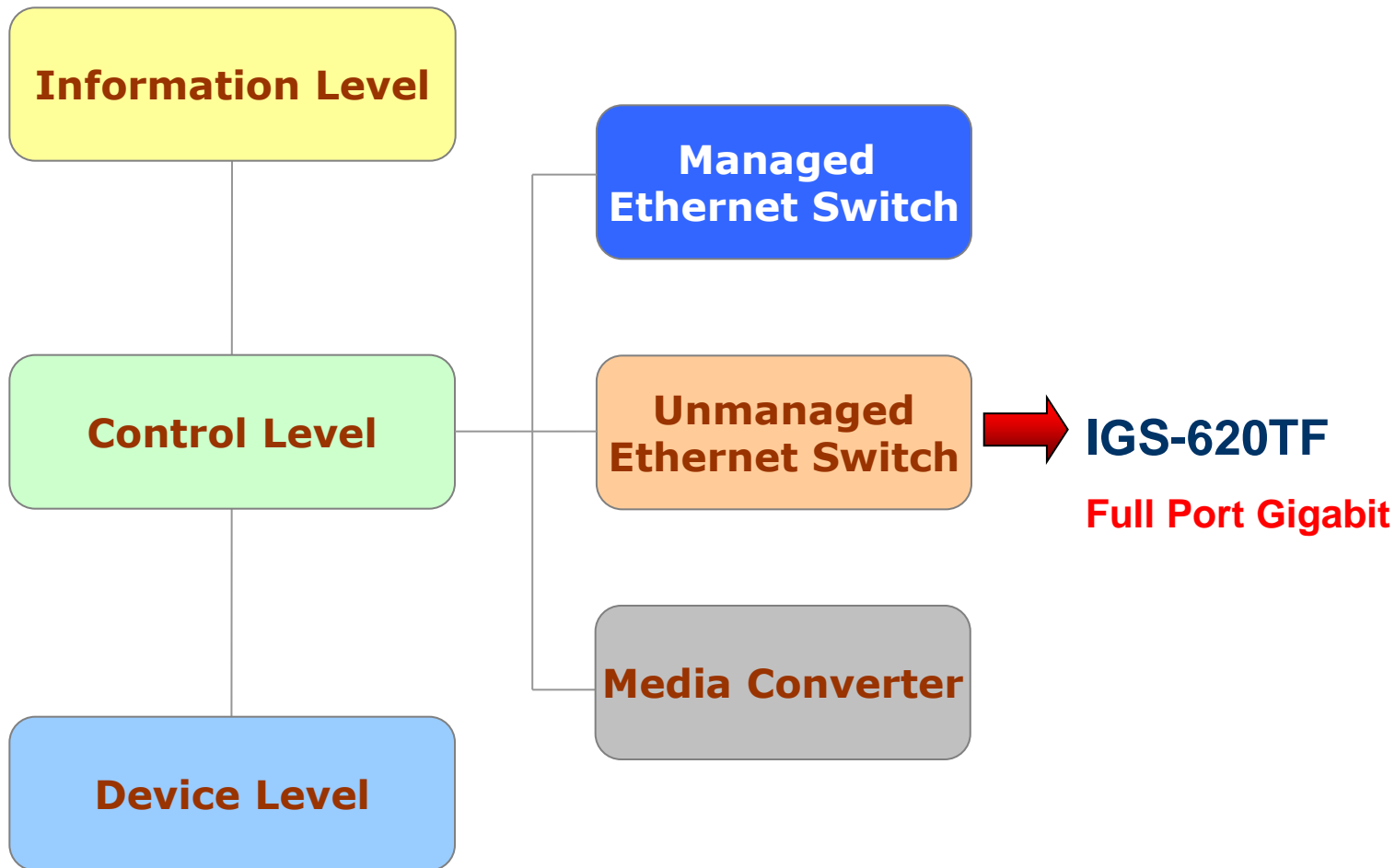
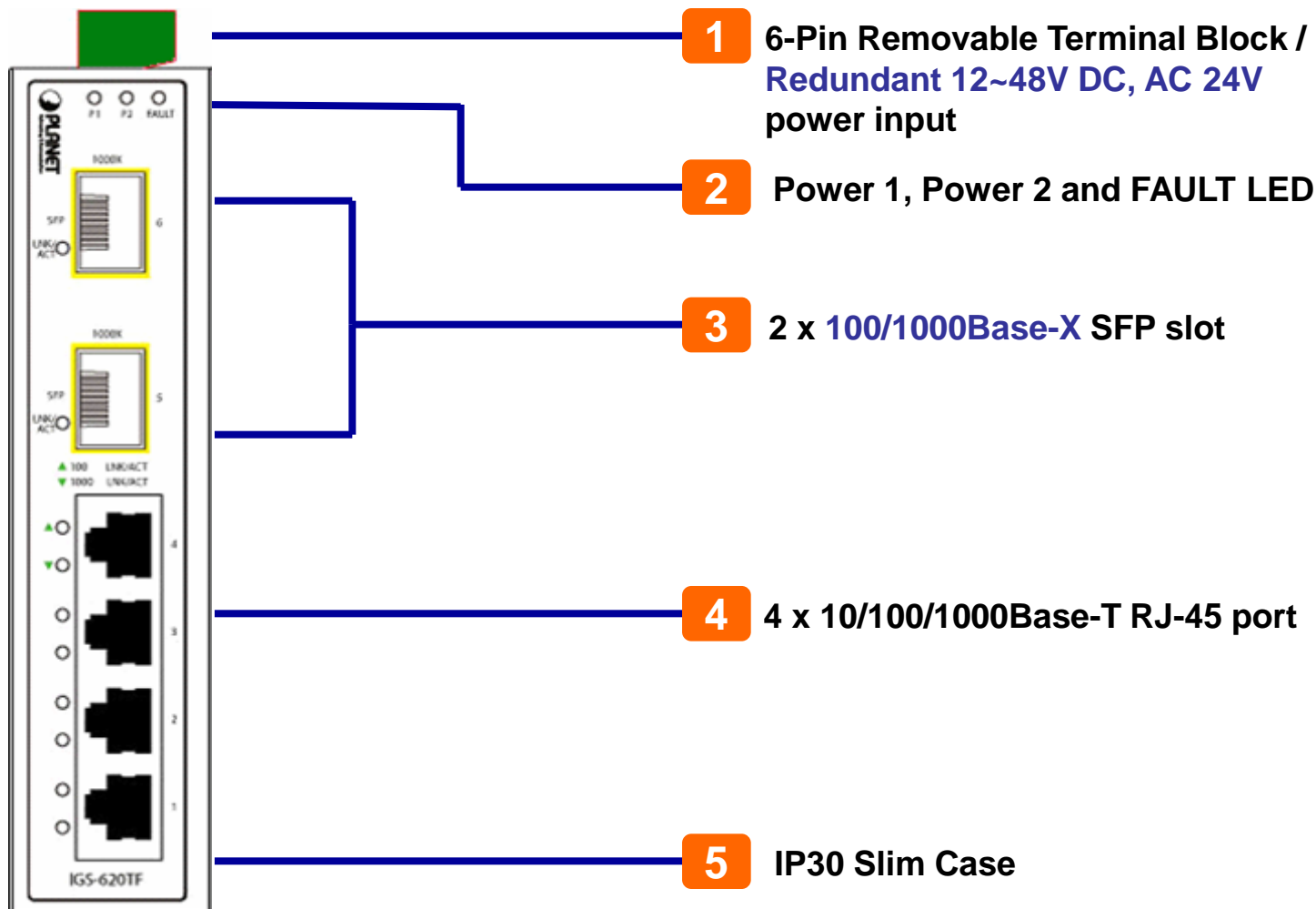◆ **Hardened Environments, Wide Operating Temperature**

75°C

-40°C

IGS-620TF
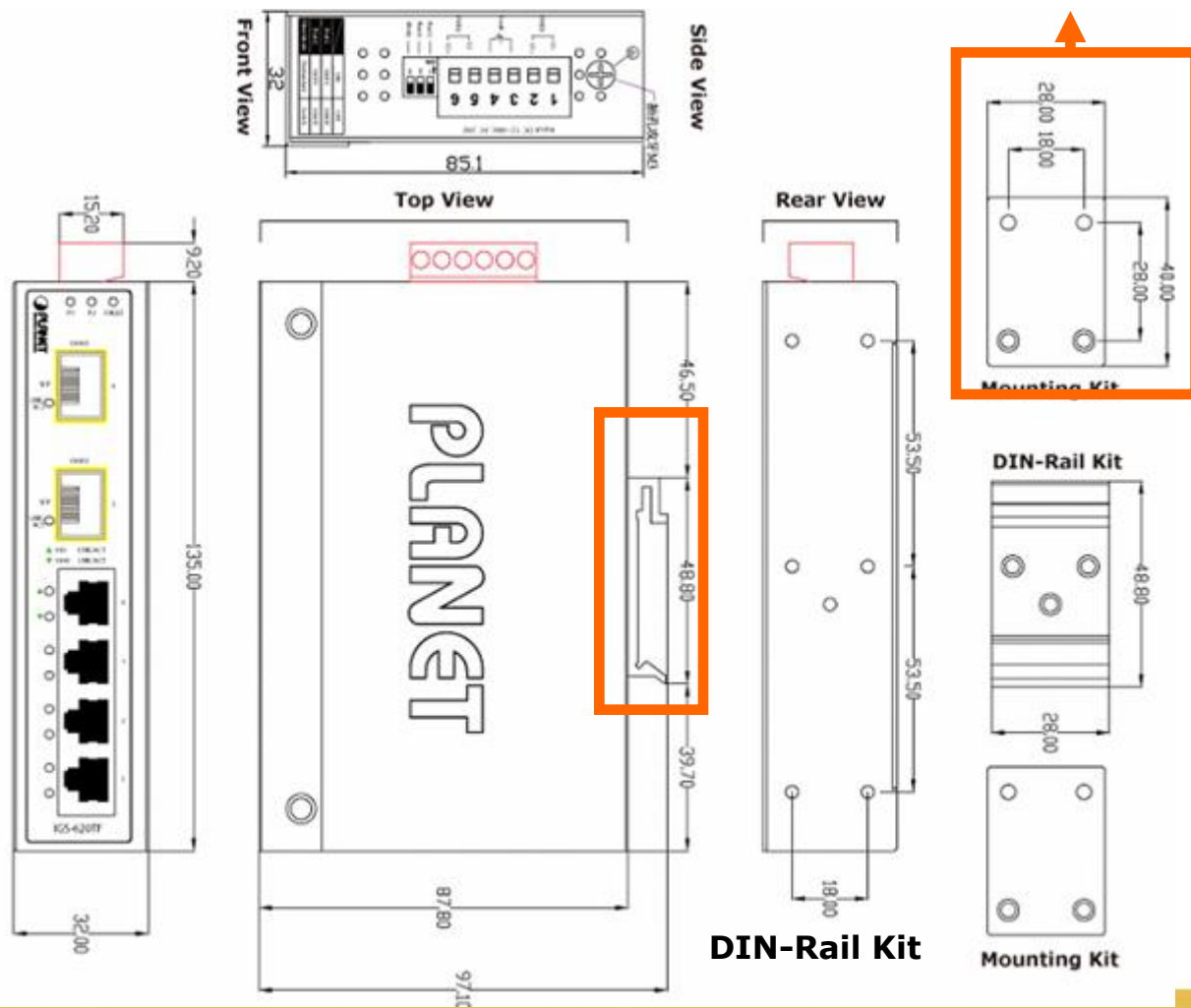
Product Overview

◆ **PLANET Industrial Product Classification**

Information Level

Control Level

Device Level

Managed Ethernet Switch

Unmanaged Ethernet Switch → **IGS-620TF**

Full Port Gigabit

Media Converter

Product Overview

◆ **Front Panel of IGS-620TF**

1 6-Pin Removable Terminal Block / Redundant 12~48V DC, AC 24V power input

2 Power 1, Power 2 and FAULT LED

3 2 x 100/1000Base-X SFP slot

4 4 x 10/100/1000Base-T RJ-45 port

5 IP30 Slim Case

Product Overview

◆ **Mechanical Drawing**

Wall Mount Plates

Product Overview

◆ **DIP Switch Setting**

The 3 DIP switch settings and descriptions:
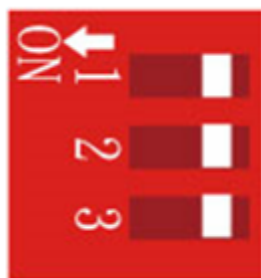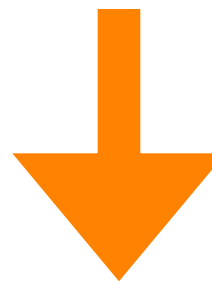
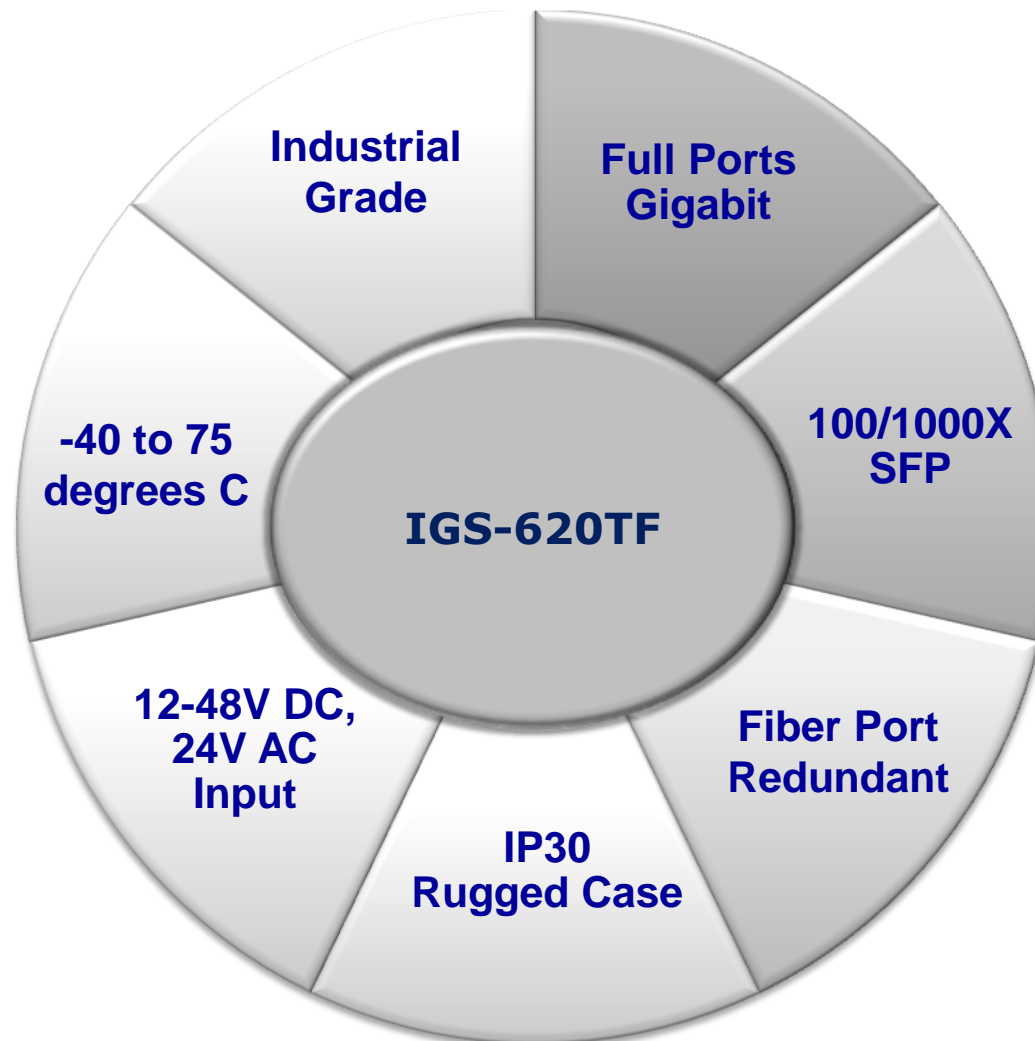|	ON	OFF
Port 5 (DIP 1)	100FX	1000X
Port 6 (DIP 2)	100FX	1000X
Fiber Redundant (DIP 3)	Fiber Redundant	Switch
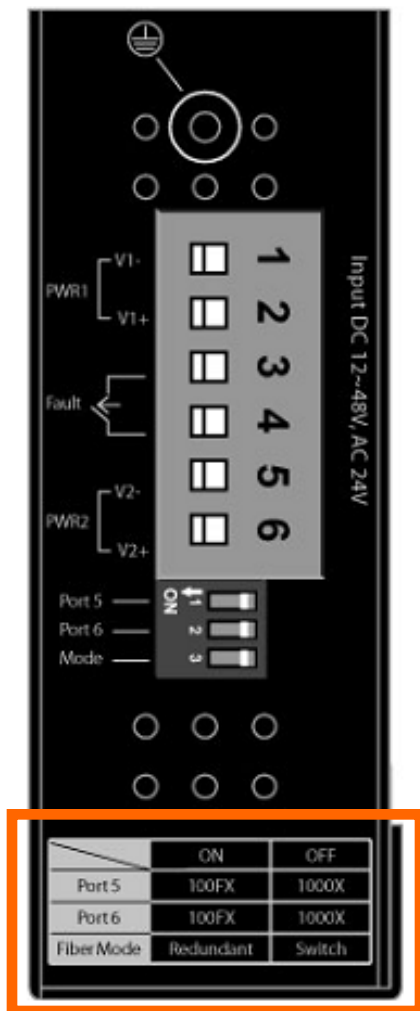
Product Benefits

◆ **Industrial Conformance**

✓ **12~48V DC, AC 24V**, redundant power with polarity reverse protect function

✓ Connective removable terminal block for master and slave power

✓ **-40 to 75** degrees C operating temperature

✓ IP-30 metal case

✓ EFT protection 6KV DC for power line

✓ 6KV DC Ethernet ESD protection

✓ Relay alarm for power failure

✓ DIN Rail and Wall mount Design for meeting installation demand in Heavy Industrial environments

✓ Stability testing with

   • **IEC60068-2-32 (Free fall)**

   • **IEC60068-2-27 (Shock)**

   • **IEC60068-2-6 (Vibration)**

Product Key Features

IGS-620TF

- Full Ports Gigabit
- Industrial Grade
- 100/1000X SFP
- -40 to 75 degrees C
- Fiber Port Redundant
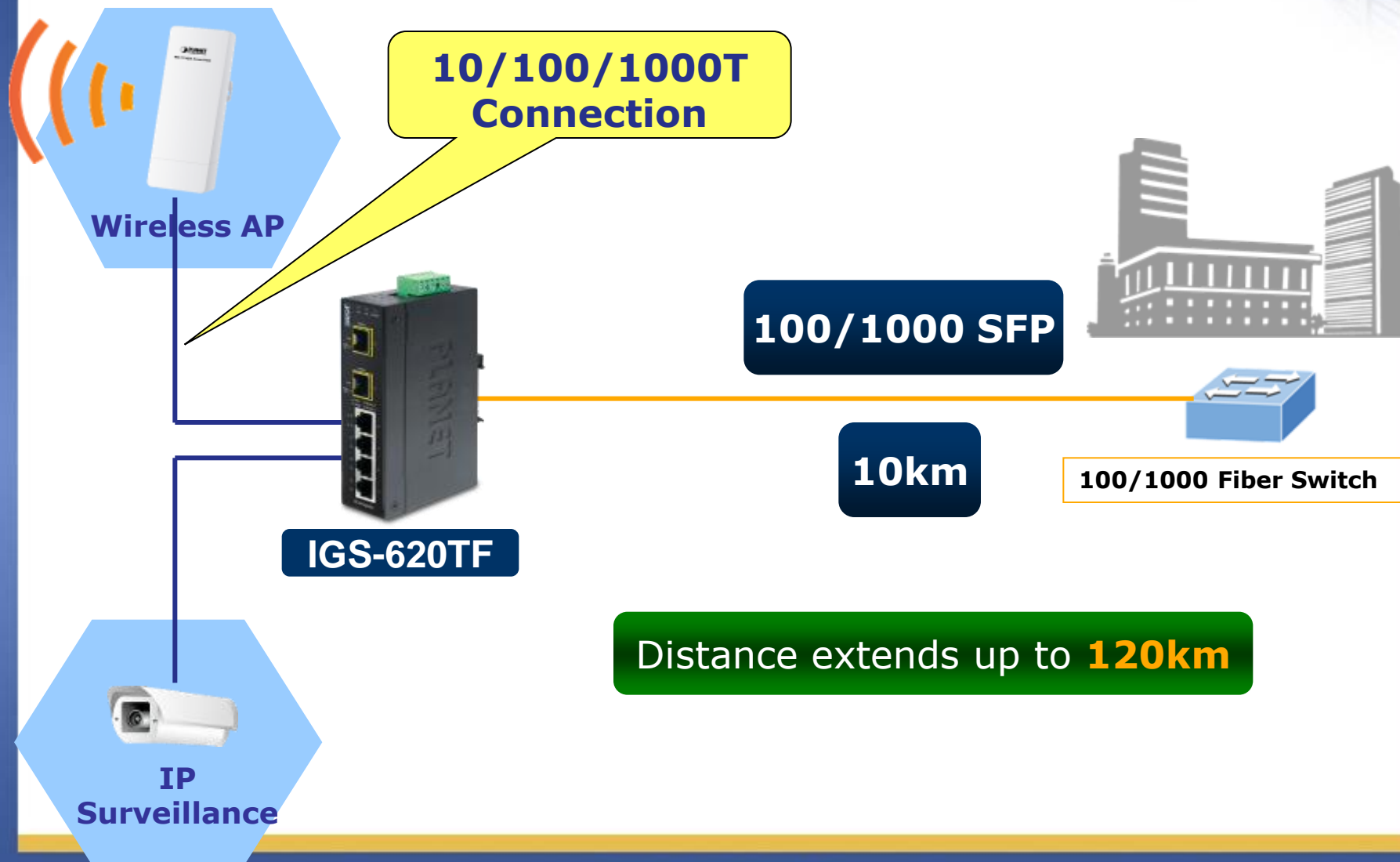- 12-48V DC, 24V AC Input
- IP30 Rugged Case
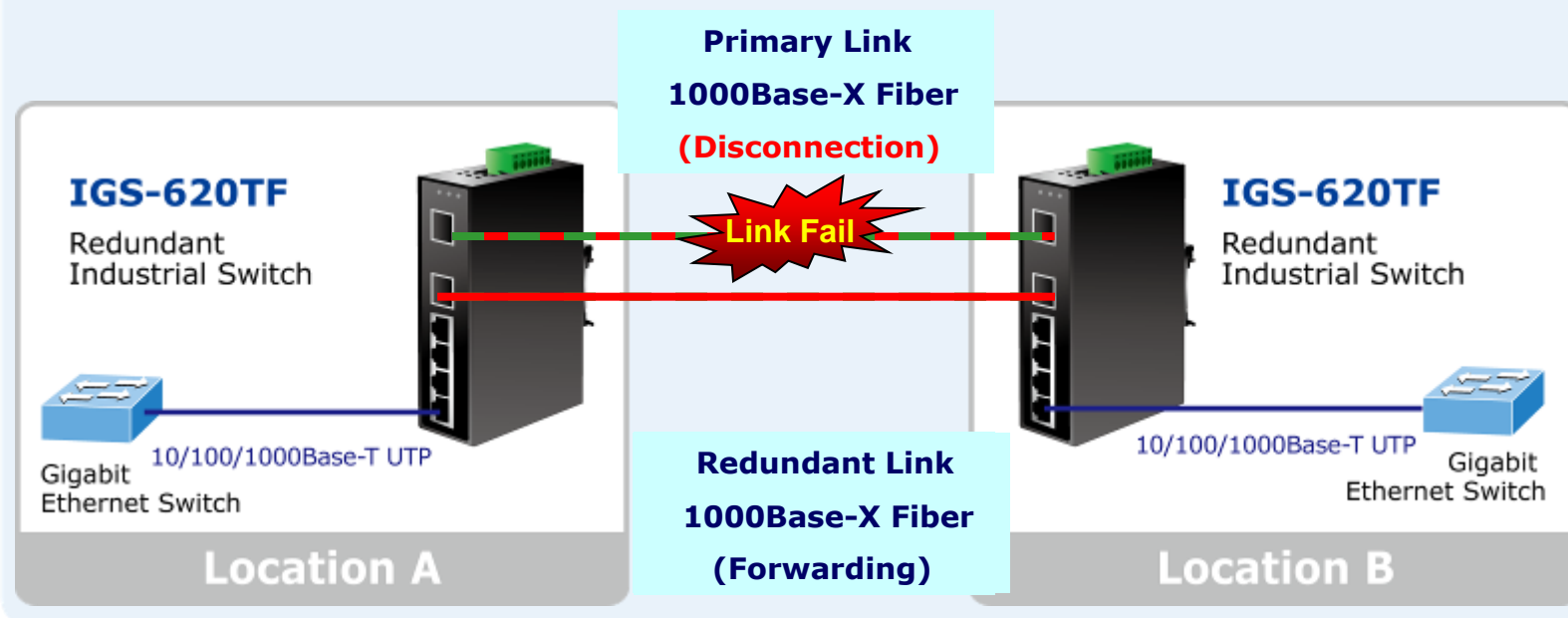
Product Features

◆ **Hardware**

- ✓ 4-Port Gigabit RJ-45 Interfaces, auto MDI / MDIX

- ✓ 2 SFP slots, flexible for Fiber-Optic network extension
  - SFP type, plug and play
  - Supports 1000Base-X and 100Base-FX transceiver via DIP switch configured
    - **1000Base-SX/LX** :Maximum 120 kilometres
    - **100Base-FX** compatible, up to 60 kilometres

- ✓ **9K bytes** Jumbo Frame
- ✓ **1K bytes** MAC address table size
- ✓ **12Gbps** Switch Fabric
- ✓ Advanced **Fiber Redundancy** Function
  - When Primary-Port is active at a time, the Backup-Port is blocked.
  - When Primary-Port link failure occurs, the traffic will swap to Backup-Port automatically.
  - When Primary-Port is back to link-up, the traffic will swap from Backup-Port to Primary-Port.

- ✓ IP30 Metal Case Protection
- ✓ DIN-Rail and Wall-Mount Design

Product Features – Fiber Optic Link

10/100/1000T Connection

Wireless AP

IGS-620TF

IP Surveillance

100/1000 SFP

10km

100/1000 Fiber Switch

Distance extends up to **120km**

Product Features – Fiber Redundancy

Site to Site Fiber Link Redundancy—ISP, Bank and Enterprise

Primary Link
1000Base-X Fiber
(Disconnection)

Link Fail

IGS-620TF
Redundant
Industrial Switch

IGS-620TF
Redundant
Industrial Switch

10/100/1000Base-T UTP

Gigabit
Ethernet Switch

Redundant Link
1000Base-X Fiber
(Forwarding)

10/100/1000Base-T UTP
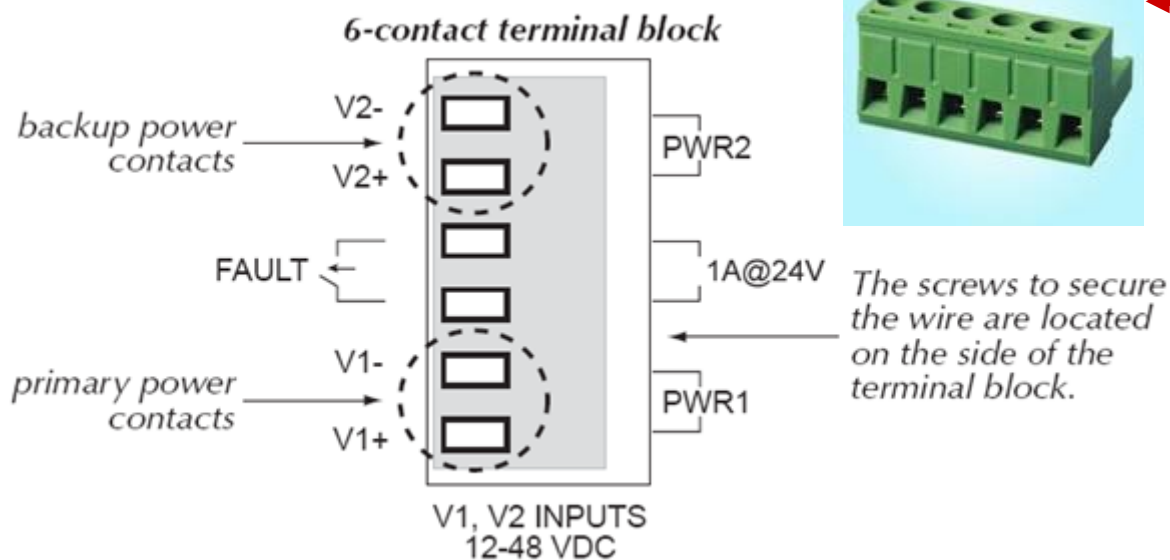
Gigabit
Ethernet Switch

Location A

Location B

Rapid Fiber Redundancy

Product Features
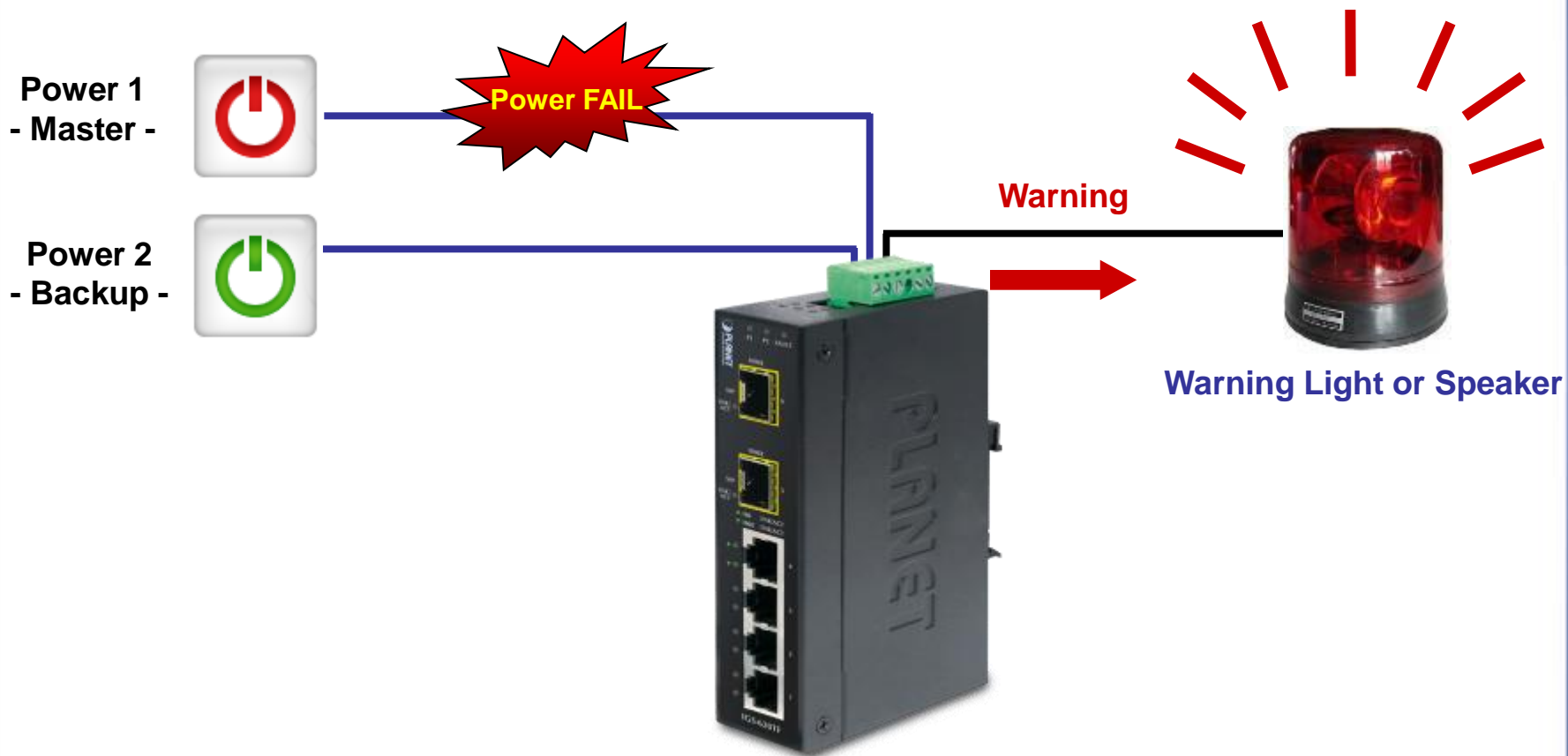
◆ **Wide-ranging redundant power design**

✓ PWR1 & PWR2 12~48V DC redundant power input

✓ 1A@24V Relay alarm for power down and port down

✓ Power polarity reverse protect

✓ Connective removable terminal block for primary and backup power

6-contact terminal block

backup power contacts → V2- / V2+ — PWR2

FAULT — 1A@24V

primary power contacts → V1- / V1+ — PWR1

V1, V2 INPUTS
12-48 VDC

The screws to secure the wire are located on the side of the terminal block.

Product Features

◆ **Real-Time Fault Relay Alarm**

Power 1
- Master -

Power 2
- Backup -

Power FAIL

**Warning**

Warning Light or Speaker

Applications

◆ **Hardened Environment Application**

- ✓ The IGS-620TF Industrial Gigabit Ethernet Switch offers full port Gigabit speed. It provides very high reliability and security features to make sure the continuous operation in harsh environments such as control cabinet of transportation, factory, outdoors and places where extreme low or high temperatures can be experienced.

- ✓ Moreover, the IGS-620TF is also compatible with **100Mbps** and **1000Mbps** SFP transceivers to provide a strong, stable and long-distance connection and flexible industrial networking deployment.
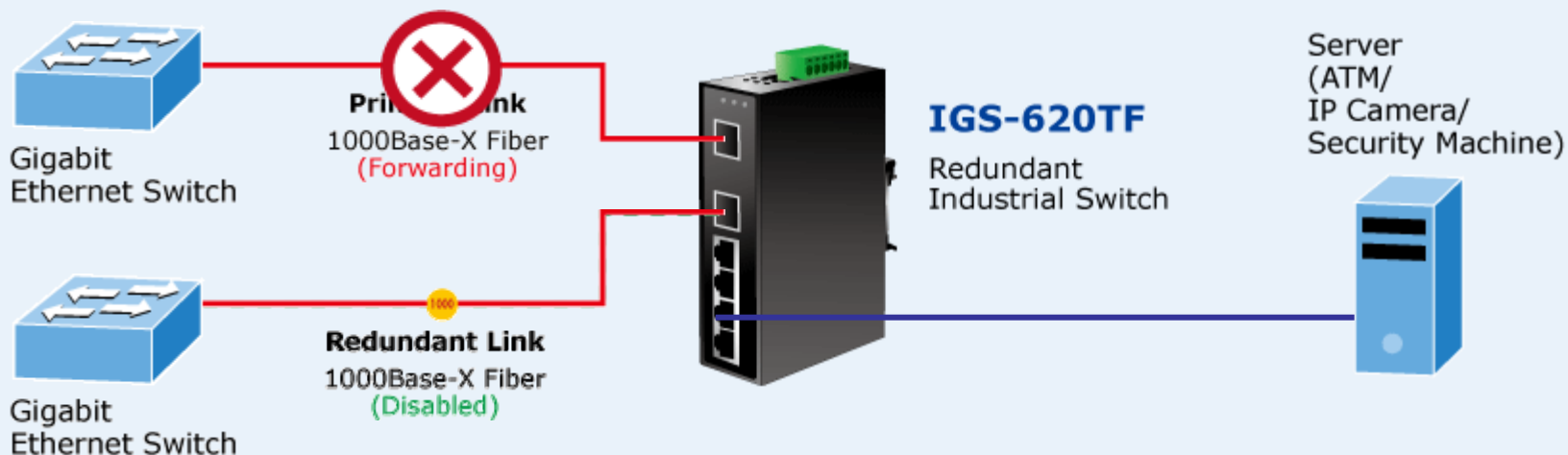
Applications

◆ **Harsh Climate**

Outdoor Camera

Long-Distance Fiber uplink
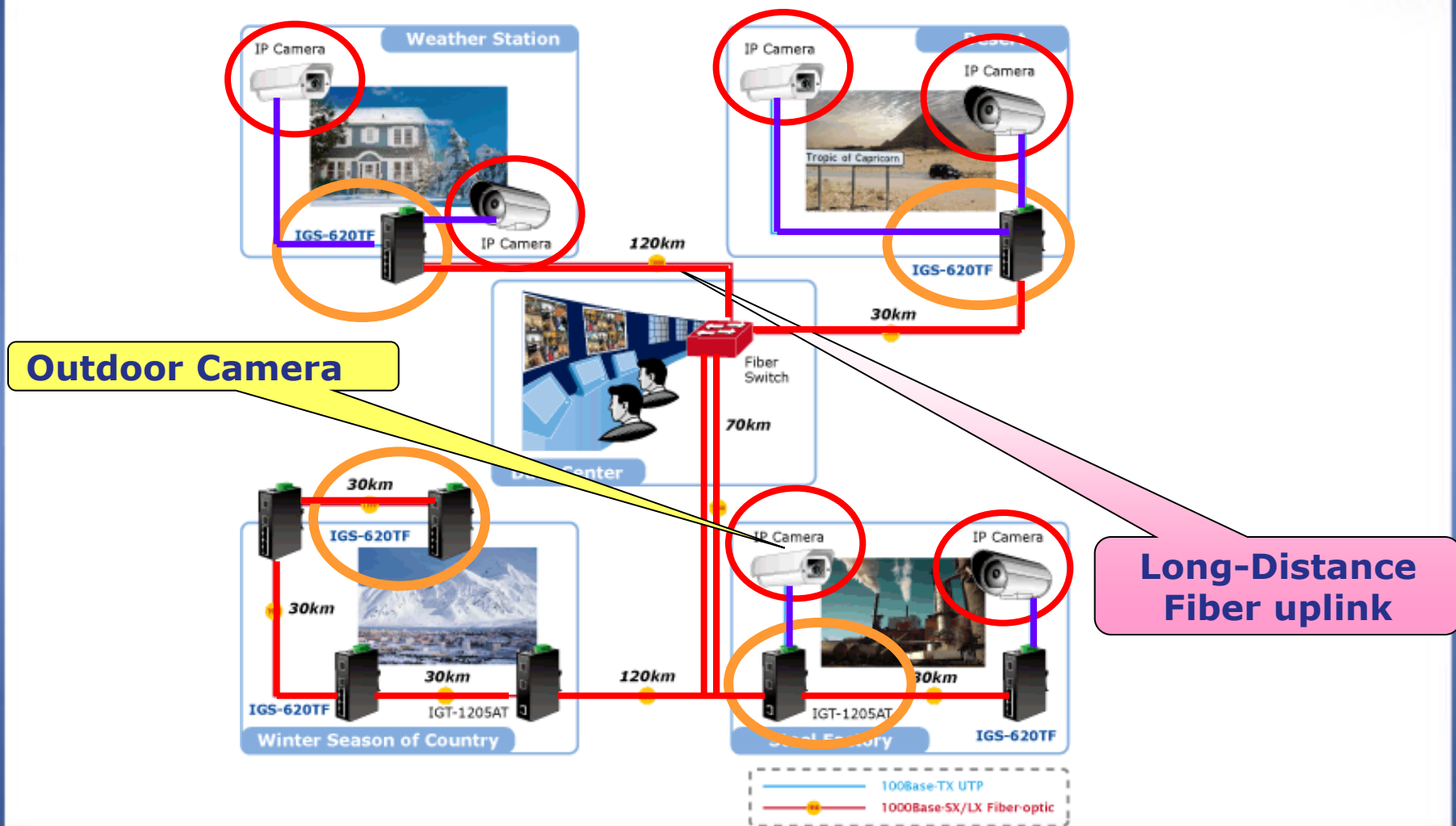
Applications

◆ **Redundancy Applications**

✓ The IGS-620TF provides rapid **fiber redundancy** of link for highly critical Ethernet applications.

✓ The redundant-mode supports **auto-recover** function. If the destination port of a packet is link-down, it forwards the packet to the other port of the backup pair.

Link Path Redundant to Critical Network Service

Gigabit Ethernet Switch
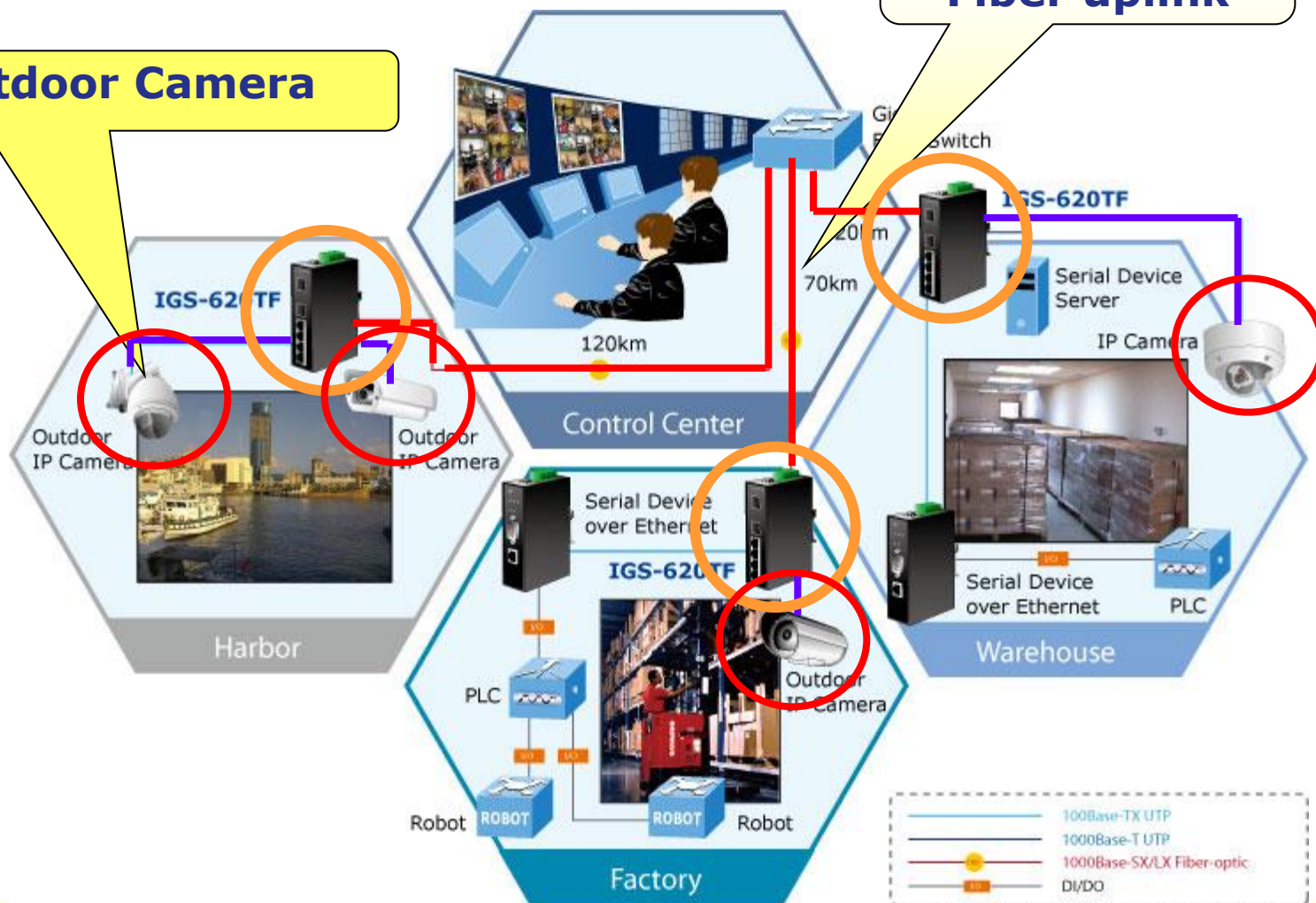
Primary Link
1000Base-X Fiber
(Forwarding)

IGS-620TF
Redundant Industrial Switch

Server
(ATM/
IP Camera/
Security Machine)

Redundant Link
1000Base-X Fiber
(Disabled)

Gigabit Ethernet Switch

Rapid Fiber Redundancy

Appendix Sales Target

◆ **Target Markets**

✓ Tender Market (Public construction)

✓ System Integrator

✓ IE Distributor

✓ Factory

✓ Transportation

✓ Hospital / Bank

◆ **Profitable Products**

✓ **The following Industrial Switches are potential to all customers :**

• ISW-621TF, IGS-801T, IGS-802T, IGT-90xT series

✓ Upgrade Industrial Fast Ethernet to **Industrial Gigabit Ethernet**

✓ Need stable **Gigabit operating performance** under Industrial environments

✓ Who needs flexible **100/1000X fiber optic link** capability for long-distance deployment in harsh environments?

Appendix

◆ **Available Gigabit Fiber Optic SFP Modules:**

  ✓ MGB-GT **SFP-Port 1000Base-T Module-100m**

  ✓ MGB-SX **SFP-Port 1000Base-SX mini-GBIC module-550m**

  ✓ MGB-LX **SFP-Port 1000Base-LX mini-GBIC module-10km**

  ✓ MGB-L50 **SFP-Port 1000Base-LX mini-GBIC module-50km**

  ✓ MGB-L70 **SFP-Port 1000Base-LX mini-GBIC module-70km**

  ✓ MGB-L120 **SFP-Port 1000Base-LX mini-GBIC module-120km**

  ✓ MGB-LA10 **SFP-Port 1000Base-LX (WDM,TX:1310nm) mini-GBIC module-10km**

  ✓ MGB-LB10 **SFP-Port 1000Base-LX (WDM,TX:1550nm) mini-GBIC module-10km**

  ✓ MGB-LA20 **SFP-Port 1000Base-LX (WDM,TX:1310nm) mini-GBIC module-20km**

  ✓ MGB-LB20 **SFP-Port 1000Base-LX (WDM,TX:1550nm) mini-GBIC module-20km**

  ✓ MGB-LA40 **SFP-Port 1000Base-LX (WDM,TX:1310nm) mini-GBIC module-40km**

  ✓ MGB-LB40 **SFP-Port 1000Base-LX (WDM,TX:1550nm) mini-GBIC module-40km**

  ✓ MGB-TSX   **SFP-Port 1000Base-SX mini-GBIC module-550m (-40~75℃)**

  ✓ MGB-TLX   **SFP-Port 1000Base-LX mini-GBIC module-10km (-40~75℃)**

  ✓ MGB-TL30 **SFP-Port 1000Base-LX mini-GBIC module-30km (-40~75℃)**

  ✓ MGB-TL70 **SFP-Port 1000Base-LX mini-GBIC module-70km (-40~75℃)**

Appendix

- **Available Fast Ethernet Fiber Optic SFP Modules:**

  - ✓ **MFB-FX** SFP-Port 100Base-FX Transceiver (1310nm) -2km

  - ✓ **MFB-F20** SFP-Port 100Base-FX Transceiver (1310nm) – 20km

  - ✓ **MFB-F40** SFP-Port 100Base-FX Transceiver (1310nm) – 40km

  - ✓ **MFB-F60** SFP-Port 100Base-FX Transceiver (1310nm) – 60km

  - ✓ **MFB-FA20** SFP-Port 100Base-BX Transceiver (WDM,TX:1310nm) -20km

  - ✓ **MFB-FB20** SFP-Port 100Base-BX Transceiver (WDM,TX:1550nm) -20km

Appendix

◆ **Available DIN-Rail Power Supply:**

- ✓ **PWR-40-24**   **40W** 24V DC Industrial DIN Rail Power Supply

- ✓ **PWR-60-24**   **60W** 24V DC Industrial DIN Rail Power Supply

- ✓ **PWR-75-24**   **75W** 24V DC Industrial DIN Rail Power Supply

- ✓ **PWR-120-48**   **120W** 48V DC Industrial DIN Rail Power Supply

- ✓ **PWR-240-48**   **240W** 48V DC Industrial DIN Rail Power Supply

Activating IP Power