

# IS-DG406P Series

6-ports Din-Rail Web-Smart Managed Layer 2 Industrial PoE Switch



The IS-DG406P Series are full Gigabit web-smart managed 6-port Ethernet switch with 2 GTX/FX port and up to 4 10/100/1000Mb IEEE 802.3af/at PoE ports provide easy to use plug-n-play applications; The cost effective IS-DG406P Series web-smart managed switches can provide power and data directly through a single Ethernet cable, which is ideal for factory production line, wide-area distributed wireless network backbone or IP Surveillance system. The IS-DG406P Series switches are especially good for Building automation, CCTV, ITS and security/safety related applications.



## Key features

- ▶ 6/4 Gigabit RJ45 Copper ports plus 0/2 100 / 1000 Based SFP(SX/LX/LHX) ports
- ▶ Support up to 4 PoE ports, IEEE 802.3af/at PoE, 15.4/30 Watt output, Full Load
- ▶ Support 9K Jumbo frames
- ▶ Layer 2 Line-Speed Switching Fabric, non-blocking
- ▶ Support Network redundancy IEEE 802.3ad LACP/Port Trunk
- ▶ Support standard redundant protocol STP, RSTP
- ▶ Support Port-based, IEEE 802.1Q Tag-based VLAN, IEEE 802.1p QoS
- ▶ Support Bluetooth Web-Access Configuration
- ▶ Support Bluetooth Mesh for IOT device connectivity(Preliminary)
- ▶ Support Firmware and Configuration Upgrade via USB host
- ▶ Support Loop Detection
- ▶ Redundant Power Input, dual 46~57 VDC power input.
- ▶ Support SNMP v1/v2c
- ▶ Din-Rail and Wall Mount Installation
- ▶ -40~75°C operating temperature
- ▶ IP 30 Protection
- ▶ Fan-less Design
- ▶ Fault Alarm Notification (Power, Ports)

## Specification

### Ethernet

Operating Mode	Store and Forward, L2 wire-speed/non-blocking switching engine
MAC addresses	16K
Packet Buffer	2 Mbits
Jumbo Frame	9K
Switching Fabric / Back Plane	12Gbps

### RJ45 Copper ports

Speed	10/100/1000 Mbps
MDI/MDIX Auto-crossover	Support straight or cross wired cables
Auto-negotiation/Duplex	10/100/1000 Mbps speed auto-negotiation; Full & Half Duplex
PoE	IEEE 802.3af/at (15.4/30 Watt), PoE/PoE+

### Fiber Ports

Port Types supported	100/1000 Base SFP Slot
Filter port connector	LC/RJ45 connector for fiber ports
Optimal fiber cable	Typical 50 or 62.5/125 $\mu$ m for multimode (mm) Typical 8 or 9/125 $\mu$ m for single mode (sm)

### Protocols & Standards

IEEE 802.3, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3z, IEEE 802.3x, IEEE 802.1D/w/s, IEEE 802.1Q/p, IEEE 802.1ab, IEEE 802.3ad LLDP, IPv4/IPv6, SNMP v1/v2c, TFTP, ARP, RARP, Telnet, Syslog, Flow Control, Back Pressure, ICMP, UPD, TCP
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### Bluetooth

Network Topology	Star / Mesh
Distance	1km (Point to Point)
Functionality	Configuration / Web-Access
Bluetooth Mesh	Q2, 2017 (IIOT Device Connectivity) Q3,

### USB 2.0

Host Type	A
Functionality	Configuration Upgrade / Firmware Upgrade
Support	Flash disk or hard disk (USB mass storage) with partition (Logic unit number, LUN)
File system	FAT12, FAT16, FAT32, NTFS3.1(read-only) and before

### Network Redundancy

Spanning Tree Protocol	IEEE 802.1D/1w, STP/RSTP
Port Trunk / LACP	Static Trunk or LACP (Link Aggregation Control Protocol)

### Bridge, VLANs, Protocols

Flow Control	IEEE 802.3x (Full Duplex) and Back-Pressure (Half Duplex)
VLAN Types	Port-Based VLAN IEEE 802.1Q tag-based VLAN
VLAN ID	4K
LLDP	IEEE 802.1ab LLDP

### Traffic management & QoS

Priority	IEEE 802.1p QoS
Scheduling schemes	SPQ, WRR

### Security

Storm Control	Multicast / Broadcast / Flooding Storm Control
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### Management

User Management Interfaces	Web-based Management Telnet CLI (Command Line Interface) SNMP V1, V2c
Management Security	HTTPs
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Upgrade & Restore	FTP/TFTP for Firmware Upgrade
Diagnostic	Syslog
DHCP	Client Mode
SNTP	YES
System Status	Device info/status; Ethernet port status

### Power

Power Input	Redundant Power Input, Removable Terminal Block
Input Voltage Range	46-57 VDC
Reverse power protection	YES
Power Consumption	8.5 Watt (Without PD Load), PSE: 4 x 30Watt, total power budget, 120 Watt

### Indicators

Power status indication	Power Input status
Ethernet port indication	Link & speed
Bluetooth	Activated

### Environmental and Compliances

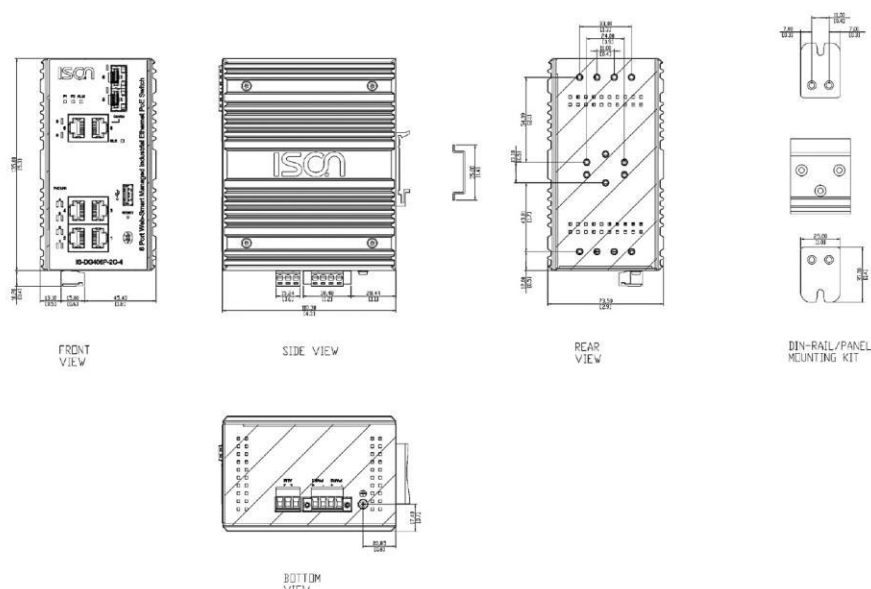
Operating Temperature	-40~75°C (Cold startup at -40°C)
Storage Temperature	-40~85°C
Humidity	5~95% (Non-Condensing)

Vibration, shock, free fall	IEC-60068-2-6, -27, -32
Electrical safety	CE
EMC	FCC Part 15, CISPR 22 (EN55022) Class A IEC-61000-4-2, -3, -4, -5, -6 (Level 3)
RoHS & WEEE	RoHS (Pb free) and WEEE Compliant
MTBF	>200,000 hrs

### Mechanical

Protection	IP30
Dimension	135mmx73.5mmx110mm (LxWxD)
Weight	0.9 kg
Installation	Din-Rail Mount, Wall mount
Relay Output	1A, 24V, Normal Open

### Dimension Diagram



### Ordering Information

Available Models	Description	10/100/1000Mb TX	100/1000Mb FX
IS-DG406P-2C-4	Industrial 6 port Gigabit Layer 2 Web-smart Managed Switch, 4 PoE, IEEE 802.3af/at, 2G Combo	4 (4 PoE)	2 (SFP or RJ45)

### Accessories

1. 100 Mb SFP Modules
2. Gigabit SFP Modules
3. IS-RK2U 19" rack mounting kit
4. IS-RK4U 19" rack mounting kit

### Package Checklist

- IS-DG406P Switch
- Quick Installation Guide (Printed)
- Documentation & Software CD
- RJ45/SFP Cap/Wall Mount kit