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**in Network and Fiber Optic System**


# Technical Specification

## SAE-IPE4600T-DGFIM

**4 ports PoE 10/100/1000Mbps switch & 2 gigabit SFP fiber slot ports**

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## Product Description

- Industrial design, 4_10/100/1000Mbps Ethernet RJ45 ports with Auto Uplink™ and 2 gigabit LC fiber optical slots
- Single PoE Port Power Output/ Max 15.4 watts (IEEE 802.3af), Max 30 watts (IEEE 802.3at) per port
- Total power output:60W, Max:120W
- Support IEEE802.3x flow control for Full duplex Mode and back pressure for Half duplex Mode
- RJ 45 port supports Auto MDI/MDIX
- Automatic MAC address learning and aging
- Auto-Negotiation for Full-duplex Mode and Half-duplex Mode
- Provide DIN35 rail type installation method
- LED indicators for monitoring power/link/activity, easy to use
- Electromagnetic compatibility of up to 4 grade standard
- IP40 protection class
- Superior performance, successfully used in industrial field
- Support both standard end-span, mid-span optional

## Full Description

This **SAE-IPE4600T-DGFIM** Industrial fast ethernet PoE switch prepare a field that power and data can be feed from a single point, using Power over Ethernet (PoE) over a single cable. Four fast Ethernet ports, all ports can supply industry-standard IEEE 802.3af/IEEE 802.3at power for every Poe standard devices. It provides the ideal combination of affordability and capabilities for entry level networking of industrial, enterprise application which demands industrial, surveillance, IP Phone, IP Camera or Wireless applications, thus helps you create a more efficient workforce. Regarding to utilize advanced auto-sensing algorithm the SAE-IPE4600T-DSFPM gives power only to IEEE802.3af/IEEE 802.3at front-end devices, so don't worry about connecting PoE or non-PoE devices to this feeder.

Additionally, this good gives up the power when PoE devices are disconnected. Intelligently, this PoE SAE-IPE4600T-DGFIM can recognize automatically PoE demands of devices, speed, duplex, and cable type using Auto Uplink™. SAE-IPE4600T-DGFIM is made with high quality of rigorous screened components, which have superior performance in stability, environmental adaptability. It can work normally in very cold environment to very hot from -40°c to +75°c. The product is planned in a way to have better resistance against corrosion and electromagnetic interference. Power input also made a suitable and reliable types of power, to get more powerful suitability to environment.

## Applications

- IP cameras monitoring systems and transmitting systems
- Access points wireless systems and transmission data
- Digital Radio in transmission systems
- Management and support Intelligent transportation supervisory (ITS)
- Monitoring TV medical and management
- Long-distance Multi-media Schooling, Campus monitoring
- Broadcast television transmission system

## Technical specification

| **Product model** | SAE-IPE4600T-DGFIM |
|---|---|
| **Interface** | Ports 4 10/100/1000Base-T ports<br>2 gigabit LC fiber slots ports |
| **PoE Specification** | |
| ➢ PoE Standard/ Supports both IEEE802.3af and IEEE802.3at | |

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| ➢ Single PoE Port Power Output/ Max 15.4 watts (IEEE 802.3af), Max 30 watts (IEEE 802.3at)<br>➢ 4 PoE ports/ auto detect AF/AT devices<br>➢ PoE Port Output/input Voltage: 60W, Max:120W/ DC48-57V<br>➢ Power Pin Assignment/ 1/2+;3/6- | |
| **Switch Processing Scheme** | Store-and-Forward |
| **Optical Interface** | SFP slot |
| **Optical Transmission Distance** | 550m-20km, or more, depends on optical module you used |
| **Performance Specification** | Bandwidth: 10Gbps<br>Packet Buffer Memory: 1M<br>Packet Forwarding Rate: 14.88Mbps/port<br>Packet process capacity:128Gbps<br>Address Table: 1K<br>MTBF: 300,000 hours |
| **Layer2 Switching** | |
| **Spanning Tree Protocol (STP)** | STP (IEEE802.1d)<br>RSTP(IEEE802.1w) |
| **MAC filter** | Enabled |
| **Aggregation** | Provide LACP<br>Provide static polymerization<br>Provide the largest 7 aggregation groups, each aggregation group |
| **VLAN** | Support up to 4K VLANs simultaneously (out of 4096 VLAN IDs)<br>4K VLAN based on IEEE802.1Q |

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| **Multicast** | Provide IGMP Snooping V1/V2 and Provide1024 multicast groups at most.<br>Provide the user's quick departure mechanism<br>Provide MLD Snooping V1/V2<br>Provide multicast VLAN |
| **Protocol support** | DTP,VTP,NTP,TFTPLACP,UPLD,pagp,IGMPV3 |
| **Recovery Time** | <50ms@100 |
| **Industrial Ring Network Protocol** | Provide G.8032 (ERPS), <50ms ring protection for industrial high reliable application 1024 devices per ring. |
| **PoE Management** | Total power limit of PoE power supply<br>PoE output power allocation per port, close/af/at<br>PoE output priority configuration for each port<br>PoE working state display per port<br>Power delay start<br>PoE work and time scheduling<br>Standard IEEE 802.3at POE$^{+}$ , IEEE 802.3af |
| **Safety Features** | |
| **safety parts** | ➢ Secure Shell (SSH) Protocol/ SSH secures Telnet traffic in or out the switch, SSH v1 and v2 are supported<br>➢ Secure Sockets Layer (SSL), HTTPS/ SSL encrypts the http traffic, allowing advance secure<br>➢ access to the browser-based management GUI in the switch<br>➢ Port Security/ Locks MAC Addresses to ports, and limits the number of learned MAC addresses<br>➢ DHCP-Snooping/ prevent unauthorized configuration and use of IP addresses, while providing support<br>for IP Source Guard and ARP detection<br>➢ IP Source Guard/ Prevents datagram with spoofed addresses from being in the network<br>➢ ARP Inspection/ Prevent ARP spoofing attacks and ARP |

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| | ➢ Storm control/ Prevents traffic on a LAN from being disrupted by a broadcast, multicast, or unicast storm on a port security:802. 1x |
| **ACLs** | Support for up to 256 entries, Drop or rate limitation based on source and destination MAC, VLAN ID or IP address, protocol, port, differentiated services code<br>point (DSCP) / IP precedence, TCP/ UDP source and destination ports, 802.1p priority, Ethernet type, Internet Control Message Protocol (ICMP) packets, IGMP packets, TCP flag |
| **Management** | |
| **Maintenance and Web Interface** | ➢ Web GUI interface/ Built in switch configuration utility for browser-based device configuration (HTTP/ HTTPs). Supports configuration, system dashboard, maintenance, and monitoring<br>➢ Dual Image/ Dual image provides independent primary and secondary OS files for backup while upgrading<br>➢ Firmware upgrade/ Web browser upgrade (HTTP/ HTTPs) and TFTP Upgrade through console port as well<br>➢ Port mirroring/ Traffic on a port can be mirrored to another port for analysis with a network analyzer or RMON probe. Up to N 1 (N is Switch's Ports) ports can be mirrored to single destination port. A single session is supported.<br>➢ Other management/ Single IP management; HTTP/HTTPs; SSH; RADIUS; DHCP Client; SNTP; cable diagnostics; ping; syslog; Telnet client (SSH secure support) |
| **Green and Energy** | Compliant IEEE802.3az Energy Efficiant Ethernet Task Force |

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| **System requirement** | Web browser : mozilla Firefox 2.5 or higher, google browser chrome V42 or higher, Microsoft Intenet Explorer 10 or higher<br><br>CAT5e or later Ethernet cable,<br>TCP/IP, network adapter and network operating system |

| **Requirements** | |
|---|---|
| **System requirement** | Web browser: Mozilla Firefox 2.5 or higher, Google browser chrome V42 or higher, Microsoft Internet Explorer10 or later;<br><br>Cat5e or later Ethernet cable;<br><br>TCP/ IP, network adapter and network operating system (Microsoft Windows, Linux or Mac) installed on every computer in the network. |
| **Cable length detection** | Adjusts the signal strength based on the cable length. Reduces<br><br>the power consumption for cables shorter. |
| **PoE** | |
| **PoE Standard** | IEEE802.3af/IEEE802.3at |
| **Max / Average Power Per Port** | 15.4W (IEEE 802.3af) / 30W (IEEE 802.3at) |
| **Total PWR / Input Voltage** | 120W/ 48(VDC) |
| **Power Type** | Adapter note /removable industrial 3-pin terminal block |

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## Product application DIsplay