

# Planet Managed network switch L2+ Gigabit Ethernet 10/100/1000 Energie Über PoE Unterstützung Schwarz Netzwerk-Switch Industrial 8-Port 10/100/1000T 802.3at + 2-Port 100/1000X SFP Switch w / Wide Operating Temperature



**Artikelnummer** 992007783

**Gewicht** 1kg

**Länge** 1mm

**Breite** 1mm

**Höhe** 1mm

## Produktbeschreibung

Planet Managed network switch L2+ Gigabit Ethernet 10/100/1000 Energie Über PoE Unterstützung Schwarz Netzwerk-Switch Industrial 8-Port 10/100/1000T 802.3at + 2-Port 100/1000X SFP Switch w / Wide Operating Temperature

Produktbeschreibung:

8x 10/100/1000BASE-T Gigabit Ethernet RJ45 ports with IEEE 802.3at PoE+ Injector 2x 100/1000BASE-X mini-GBIC/SFP slots for SFP type auto detection  
One RJ45 console interface for basic management and setup Power over Ethernet Complies with IEEE 802.3at Power over Ethernet Plus/end-span PSE Up to 8 IEEE 802.3af/802.3at devices powered Supports PoE power up to 36 watts for each PoE port Auto detects powered device (PD) Circuit protection prevents power interference between ports Remote power feeding up to 100m PoE management features - IEEE 802.3af and IEEE 802.3at mode switch control - Total PoE power budget control - Per port PoE function enable/disable - PoE admin-mode control - PoE port power feeding priority - Per PoE port power limit - PD classification detection - Temperature threshold control - PoE usage threshold control - PD alive check - PoE schedule Industrial Case & Installation IP30 aluminum case protection DIN rail and wall-mount design 48V DC, redundant power with polarity reverse protect function Supports EFT protection of 6000 VDC for power line Supports 6000 VDC Ethernet ESD protection -40 to 75 degrees C operating temperature Digital Input & Digital Output 2 Digital Input (DI) 2 Digital Output (DO) Integrate sensors into auto alarm system Transfer alarm to IP network via

email and SNMP trap Layer 2 Features Prevents packet loss with back pressure (half-duplex) and IEEE 802.3x pause frame flow control (full-duplex) High performance of Store-and-Forward architecture, and runt/CRC filtering eliminates erroneous packets to optimize the network bandwidth Storm Control support - Broadcast/Multicast/Unicast Supports VLAN - IEEE 802.1Q tagged VLAN - Up to 255 VLANs groups, out of 4094 VLAN IDs - Provider Bridging (VLAN Q-in-Q) support (IEEE 802.1ad) - Private VLAN Edge (PVE) - Protocol-based VLAN - MAC-based VLAN - Voice VLAN Supports Spanning Tree Protocol - IEEE 802.1D Spanning Tree Protocol (STP) - IEEE 802.1w Rapid Spanning Tree Protocol (RSTP) - IEEE 802.1s Multiple Spanning Tree Protocol, spanning tree by VLAN (MSTP) - BPDU Guard Supports Link Aggregation - 802.3ad Link Aggregation Control Protocol (LACP) - Cisco ether-channel (static trunk) - Maximum 5 trunk groups with 8 ports per trunk group - Up to 16Gbps bandwidth (duplex mode) Provides port mirror (1-to-1) Port mirroring to monitor the incoming or outgoing traffic on a particular port Loop protection to avoid broadcast loops Supports ERPS (Ethernet Ring Protection Switching) Layer 3 IP Routing Features Supports maximum 32 software static routes and route summarization Quality of Service Ingress Shaper and Egress Rate Limit per port bandwidth control 8 priority queues on all switch ports Traffic classification - IEEE 802.1p CoS - IP TOS/DSCP/IP precedence - IP TCP/UDP port number - Typical network application Strict priority and Weighted Round Robin (WRR) CoS policies Supports QoS and In/Out bandwidth control on each port Traffic-policing policies on the switch port DSCP remarking Multicast Supports IGMP snooping v1, v2 and v3 Supports MLD snooping v1 and v2 Querier mode support IGMP snooping port filtering MLD snooping port filtering MVR (Multicast VLAN Registration) Security IEEE 802.1x Port-based/MAC-based network access authentication Built-in RADIUS client to cooperate with the RADIUS servers TACACS+ login users access authentication RADIUS/TACACS+ users access authentication IP-based Access Control List (ACL) MAC-based Access Control List Source MAC/IP address binding DHCP snooping to filter distrusted DHCP messages Dynamic ARP Inspection discards ARP packets with invalid MAC address to IP address binding IP Source Guard prevents IP spoofing attacks IP address access management to prevent unauthorized intruder Management Switch Management Interfaces - Console/Telnet Command Line Interface - Web switch management - SNMP v1 and v2c switch management - SSH/SSL and SNMP v3 secure access Four RMON groups (history, statistics, alarms, and events) IPv6 IP address/NTP/DNS management Built-in Trivial File Transfer Protocol (TFTP) client BOOTP and DHCP for IP address assignment

Firmware upload/download via HTTP/TFTP DHCP Relay  
DHCP Option 82 User Privilege levels control Network  
Time Protocol (NTP) Link Layer Discovery Protocol  
(LLDP) SFP-DDM (Digital Diagnostic Monitor) Cable  
diagnostic technology provides the mechanism to  
detect and report potential cabling issues Reset  
button for system reboot or reset to factory default  
PLANET Smart Discovery Utility for deployment  
management Environmentally Hardened Design  
PLANET Industrial 8-Port Gigabit 802.3at PoE Switch,  
IGS-10020HPT, is equipped with rugged IP30 metal  
case for stable operation in heavy Industrial  
demanding environments.

With IP30 industrial case protection, the IGS-10020HPT  
provides a high level of immunity against electromagnetic  
interference and heavy electrical surges which  
are usually found on plant floors or in curbside  
traffic control cabinets.

Being able to operate under wide temperature range  
from -40 to 75 degrees C,  
the IGS-10020HPT can be placed in almost any difficult environment.

The IGS-10020HPT also allows either DIN rail or  
wall mounting for efficient use of cabinet space.

Redundant Ring, Fast Recovery for Surveillance  
System The IGS-10020HPT supports redundant ring  
technology and features strong rapid self-recovery  
capability to prevent interruptions and external intrusions.

It incorporates advanced Redundant Ringtechnology,  
Spanning Tree Protocol (802.1w RSTP), and redundant  
power supply system into customer's industrial  
automation network to enhance system reliability  
and uptime in harsh factory environments.

The IGS-10020HPT also protects customer's industrial  
network connectivity with switching recovery capability  
that is used for implementing fault tolerant ring  
and mesh network architectures.

If the Industrial network was interrupted accidentally,  
the fault recovery times could be less than 50ms  
to quickly bring the network back to normal operation.

High Power PoE for Security and Public Service  
Applications To fulfill the demand of High Power  
PoE for network applications with Gigabit speed  
transmission under wide temperature,  
the IGS-10020HPT provides 8 10/100/1000Mbps ports  
featuring both IEEE 802.3af and High Power IEEE  
802.3at Power over Ethernet (PoE) that combines  
up to 270-watt power output and data per port  
over one Cat.5E /

6 Ethernet cable. With a total 270-watt PoE budget  
on the whole system,  
the IGS-10020HPT is designed specifically to satisfy  
the growing demand of higher power consuming network  
PDs (powered devices) such as PTZ (Pan,  
Tilt & Zoom) / Speed Dome network cameras, multi-channel (802.11a /  
b / g / n) wireless LAN access points and other  
PoE network devices by providing PoE power double  
that the current conventional 802.3af PoE.

Intelligent Alive Check for Powered Device

The IGS-10020HPT PoE Switch can be configured to monitor connected PD's status in real-time via ping action.

Once the PD stops working and responding, the IGS-10020HPT will recycle the PoE port power and bring the PD back to work.

It also greatly enhances the reliability owing that the PoE port will reset the PD power, thus reducing administrator's management burden.

PoE Schedule for Energy Saving Under the trend of energy saving worldwide and contributing to environmental protection on the Earth, the IGS-10020HPT can effectively control the power supply besides its capability of giving high watts power. The built-in "PoE schedule" function helps you to enable or disable PoE power feeding for each PoE port during specified time intervals and it is a powerful function to help SMB or enterprise save power and money.

Digital Input and Digital Output for External Alarm The IGS-10020HPT supports Digital Input and Digital Output on its front panel. This external alarm enables users to use Digital Input to detect and log external device status (such as door intrusion detector ), and send event alarm to the administrators. The Digital Output could be used to alarm the administrators if the IGS-10020HPT port shows link down, link up or power failure. Layer 3 IPv4 and IPv6 Software VLAN Routing for Secure and Flexible Management To help customers stay on top of their businesses, the IGS-10020 series not only provides ultra high transmission performance and excellent Layer 2 technologies, but also IPv4/IPv6 software VLAN routing feature which allows to crossover different VLANs and different IP addresses for the purpose of having a highly secured, flexible management and simpler networking application.

Robust Layer 2 Features The IGS-10020HPT can be programmed for advanced switch management functions such as dynamic port link aggregation, Q-in-Q VLAN, private VLAN, Rapid Spanning Tree Protocol, Layer 2 to Layer 4 QoS, bandwidth control and IGMP snooping.

The IGS-10020HPT provides 802.1Q tagged VLAN, and the VLAN groups allowed will be maximally up to 255.

Via aggregation of supporting ports, the IGS-10020HPT allows the operation of a high-speed trunk combining multiple ports.

It enables a maximum up to 5 trunk groups with 8 ports per trunking,

and supports fail-over as well. Efficient Management For efficient management,

the IGS-10020HPT Managed Ethernet Switch is equipped with console, Web and SNMP management interfaces. With the built-in Web-based management interface, the IGS-10020HPT offers an easy-to-use, platform-independent management and configuration facility.

For text-based management, the IGS-10020HPT can be accessed via Telnet and the console port.

Moreover, it also offers secure remote management via any standard-based management software by supporting SNMPv3 connection which encrypts the packet content at each session.

**Powerful Security** The IGS-10020HPT offers comprehensive Layer 2 to Layer 4 Access Control List (ACL) for enforcing security to the edge.

It can be used to restrict network access by denying packets based on source and destination IP address, TCP/UDP ports or defined typical network applications.

Its protection mechanism also comprises 802.1x Port-based and MAC-based user and device authentication.

With the private VLAN function, communication between edge ports can be prevented to ensure user privacy.

The network administrators can now construct highly secured corporate networks with considerably less time and effort than before.

**Flexibility and Extension Solution** The two mini-GBIC slots built in the IGS-10020HPT support dual speed, 100BASE-FX and 1000BASE-SX/LX SFP (Small Form-factor Pluggable) fiber-optic modules, meaning the administrator now can flexibly choose the suitable SFP transceiver according to not only the transmission distance but also the transmission speed required.

The distance can be extended from 550 meters (multi-mode fiber) up to 10/50/70/120 kilometers (single-mode fiber or WDM fiber).

They are well suited for applications within the enterprise data centers and distributions.

**Perfect Integration Solution for Outdoor IP PoE Camera and NVR System** The IGS-10020HPT provides 8 10/100/1000Mbps 802.3at PoE ports and can offer sufficient PoE power for 8 PoE IP cameras at the same time.

In addition, with the 2 100/1000BASE-X SFP interfaces, the IGS-10020HPT can connect to core fiber switch and send video stream to NVR and monitoring center.

Through the high performance switch architecture, the IGS-10020HPT facilitates the recorded video files from the 8 PoE IP cameras to be saved in the NVR systems.

Furthermore, the NVR systems can be controlled and monitored both in the local LAN and the remote site via Internet.

The IGS-10020HPT undoubtedly brings an ideal secure surveillance system at a lower total cost.

Technische Details:

Allgemein

Gerätetyp

Switch - 10 Anschlüsse - L2+ - managed

Gehäusetyp

An DIN-Schiene montierbar, wandmontierbar

Untertyp

Gigabit Ethernet

Ports

8 x 10/100/1000 (PoE+) + 2 x Gigabit SFP

Power Over Ethernet (PoE)

PoE+

PoE-Budget

270 W

Leistung

Switching Fabric-Bandbreite: 20 Gbit/s

Bandbreite: 16 Gbit/s

Durchsatz (64-Byte Paketgröße): 14,8 Mpps

Kapazität

VLAN-Gruppen: 255

ACL-Einträge: 123

Virtuelle Schnittstellen (VLANs): 4094

Einträge in Routingtabelle: 32

Größe der MAC-Adresstabelle

8000 Einträge

Jumbo-Rahmenunterstützung

9KB

Routing Protocol

IGMPv2, IGMP, IGMPv3, MLDv2, MLD

Remoteverwaltungsprotokoll

SNMP 1, RMON, Telnet, SNMP 3, SNMP 2c, HTTP, SSH, CLI

Verschlüsselungsalgorithmus

SSL

Authentifizierungsmethode

RADIUS, TACACS+

Leistungsmerkmale

Flusskontrolle, Vollduplex-fähig, Routing, DHCP Support, Auto-Negotiation, BOOTP-Unterstützung, VLAN-Unterstützung, IGMP Snooping, Port-Spiegelung, Weighted Round Robin (WRR) Queuing, Store-and-Forward, IPv6-Unterstützung, Halbduplex-Modus, Vollduplex-Modus, Firmware aktualisierbar, Spanning Tree Protocol (STP) Support, unterstützt Rapid Spanning Tree Protocol (RSTP), Multiple Spanning Tree Protocol (MSTP) Support, DHCP-Snooping, Trivial File Transfer Protocol (TFTP) Support, Access Control List (ACL) Support, Quality of Service (QoS), SSH-Unterstützung, Jumbo-Frames-Support, MLD-Snooping, Dynamic ARP Inspection (DAI), Reset-Taste, Cable Diagnostics Function, Bandbreitensteuerung, IPv4-Unterstützung, LLDP-Support, DHCP-Relais, Link Aggregation Control Protocol (LACP), Spoofing-Schutz, IP-MAC-Einbindung, Multicast VLAN Registration (MVR), Class of Service (CoS), gekennzeichnetes VLAN, TFTP-Client, 6KV ESD Protector, Type of Service (ToS), unterstützt DiffServ Code Point (DSCP), Ethernet Ring Protection Switching (ERPS), Bridge protocol data unit (BPDU), Redundant Ring Technology, Link Aggregation, Terminplaner, Digital Diagnostics Monitoring (DDM), 6KV EFT Schutz, Network Timing Protocol (NTP)

Produktzertifizierungen

IEEE 802.3, IEEE 802.3u, IEEE 802.3z, IEEE 802.1D, IEEE 802.1Q, IEEE 802.3ab, IEEE 802.1p, IEEE 802.3af, IEEE 802.3x, IEEE 802.3ad (LACP), IEEE 802.1w, IEEE 802.1x, IEEE 802.1s, IEEE 802.1ad, IEEE 802.1ab (LLDP), IEEE 802.3at

Statusanzeiger

Anschluß-Übertragungsgeschwindigkeit, Stromversorgung, fehlschlagen, Link/Aktivität

Erweiterung/Konnektivität

Schnittstellen

8 x 1000Base-T RJ-45 PoE+ - 36 W

2 x 1000Base-X SFP

1 x seriell (Konsole) RJ-45

Stromversorgung

Stromversorgungsgerät

Internes Netzteil

Redundante Stromversorgung

Ja

Erforderliche Netzspannung

DC 48 V

Verschiedenes

Produktzertifizierungen

IEC 60068-2-27, IEC 60068-2-32, IEC 60068-2-6, FCC Part 15 A, IP30

Maße und Gewicht

Breite  
15,2 cm  
Tiefe  
10,7 cm  
Höhe  
7,2 cm  
Gewicht  
1,684 kg  
Umgebungsbedingungen  
Min Betriebstemperatur  
-40 °C  
Max. Betriebstemperatur  
75 °C  
Zulässige Luftfeuchtigkeit im Betrieb  
5 - 95 % (nicht kondensierend)  
Min. Lagertemperatur  
-40 °C  
Max. Lagertemperatur  
85 °C

## Weitere Bilder

