Terrabit Networks

PRODIGY

PRODIGY   INDUSTRIAL ETHERNET SWITCH

PD1-S21-5281F-I

Managed Industrial Ethernet Switch

OVERVIEW

◉ PD1-S21-5281F-I is a new generation Managed Industrial Ethernet Switch with 24-Port 10/100/1000Base-TX and 4-Port 100/1000Base-FX Fast SFP that provide stable and reliable Ethernet transmission offered by us, with high quality design and reliability. It is positioning in the broadband network intervention market, to offer and realize Ethernet data exchange, convergence and long-distance optical transmission with efficient bandwidth and reliable fiber optic network solutions for users. The industrial switch complies with various characteristics such as mini size, no fan, low power consumption, high reliability and stability, and easy to maintain.

◉ With dual power input design, PD1-S21-5281F-I can offer redundant mechanisms for critical applications that need always-on connections. It can also operate either at standard operating temperature range -40 to 75°C. Housed in rugged DIN rail or wall mountable IP40 enclosures, these switches are perfect choices for harsh environments, such as industrial networking, intelligent transportation systems (ITS) and are also suitable for many military and utility market applications where environmental conditions exceed commercial product specifications.

FEATURES

◉ 24x10/100/1000Base-TX RJ45 ports, 4x100/1000Base-FX Fast SFP ports.

◉ Support Auto-MDIX, and full/half duplex self-negotiation mode.

◉ Provide SFP interface fiber port, support single/dual fiber transmission.

◉ Support 10K bytes giant frame, compatible with various extension protocol.

◉ 16K MAC address table.

◉ Support IEEE802.3az energy efficient Ethernet technology.

◉ Support IPv6 Protocol.

◉ Electric 8KV surge protection, easy to use in outdoor environment.

◉ Complete status indicator, working state at a glance.

◉ Power input polarity protection design, no worry about wrong operation.

◉ Metal case, no fan design.

◉ Installation method: DIN trail /Wall mounting.

TECHNICAL SPECIFICATIONS

Physical Port

• RJ45 port	24x10/100/1000Base-TX.
• Fiber port	4x100/1000Base-FX SFP.
• Console port	1.

Parameters

• CPU	RISC 300MHz.
• Flash	1 GB.
• Memory	1 GB
• Ethernet standards	IEEE802.3, IEEE802.3u, IEEE802.3z, IEEE802.3ab, IEEE802.3ad, IEEE802.3x, IEEE802.3az, IEEE802.3ah, IEEE802.1AB, IEEE802.1D, IEEE802.1p, IEEE802.1s, IEEE802.1w, IEEE802.1X, IEEE802.1Q.
• Packet buffer	4Mbits.
• Maximum packet length	Up to 10KBytes.
• MAC address table	16K.
• Transmission mode	Store and Forward(full/half duplex mode).
• Exchange property	Delay time: < 7μ.
	Switching fabric: 36 Gbps.
	L3 forwarding rate: 9,6 Mpps all wire-speed, with filtering.

For enquires, please email to info@terrabitnetworks.com

PRODIGY INDUSTRIAL ETHERNET SWITCH

LED Indicator

• Power	Connect-always.
• RJ45	Link/SPD: connect-always; data exchange-twinkle Speed light: 100Mbps-always; 10Mbps-twinkle.
• Fiber	Link/Act: connect-always; data exchange-twinkle.

Power Information

• Power access mode	Phoenix terminal, DC seat.
• Redundant power input	DC 9-56V / AC 100-240V.
• Overload protection	Yes.
• Power reverse	Support.
• Power consumption	Full-load<15W.

Physical Property

• Protection grade	IP40 aluminum case.
• Cooling mode	Natural cooling, no fan design.
• Dimensions	440mm x 310mm x 44mm (L x W x H).
• Installation mode	DIN trail/wall-mountable.
• Weight	3000g.

Working Environment

• Operating Temperature	-40C°~75C°.
• Operating Humidity	5%~90% non-condensing.
• Storage	-40C°~85C°.

Warranty

• MTBF	500,000 hours.
• Defects Liability Period	1 year warranty, lifetime technical support.

Certification Standard

• EMI	FCC Part15 Subpart B Class A, EN 55022 Class A, CE, LVD, EMC.
• EMS	IEC61000-4-2 (ESD): ±8kV (contact), ±15kV (air). IEC61000-4-3 (RS): 10V/m (80MHz-2GHz). IEC61000-4-4 (EFT): Power Port: ±4kV; Data Port: ±2kV. IEC61000-4-5 (Surge): Power Port: ±2kV/DM, ±4kV/CM; Data Port: ±2kV. IEC61000-4-6 (CS): 3V (10kHz-150kHz); 10V (150kHz-80MHz). IEC61000-4-16 (Common mode conduction): 30V (cont.), 300V (1s). IEC1613. IEC61850-3.
• Shock	IEC60068-2-27.
• Free Fall	IEC60068-2-32.
• Vibration	IEC60068-2-6.
• Safety grade	EN60950-1.

Software

• Features	TerOS.
	STP, EAPS/ERPS, Modbus TCP/IP.
	Multicast: IGMP Snooping V1/V2/V3, GMRP.
	VLAN: IEEE 802.1Q 4K VLAN, QINQ.
	Link Aggregation: manual / static / LACP.
	Routing: Static, RIP, OSPF.
	QOS: COS, DSCP, 8 queues, WRR/SP/WFQ scheduling, QOS Policy.
	Management Function: SNMP v1/v2, RMON (groups 1, 2, 3, 9), Telnet, CLI, WEB, NTP, SSH, LLDP and Universal Broad Director NMS software.
	Diagnostic Maintenance: Port mirroring, Syslog, Ping.
	Alarm management: 1 way relay alarm output, RMON, SNMP Trap.
	Security DHCP Snooping, Option 82, 802.1X, User hierarchical management, ACL,DDOS, port based MAC filtering / binding.
	Data control: Port-based ingress/egress speed limit, Full duplex IEEE 802.3x, half duplex back-pressure flow control. Broadcast storm suppression, Unknown-Multicast suppression and Unknown-Unicast suppression.

OPTIONAL ACCESSORIES

For Optional Fiber Module, please refer to Spectrum Terrabit Transceiver.

ORDERING INFORMATION

Model	Description
PD1-S21-5281F-I	Gigabit Industrial Ethernet Switch, managed, 24x10/100/1000Base-TX + 4x100/1000Base-FX SFP

For enquires, please email to info@terrabitnetworks.com