IPS1-04

MANAGED IP ETHERNET SWITCH

Automated Logic

MANAGED IP ETHERNET SWITCH FOR THE OPTIFLEX CONTROLLER LINE

The IPS1-04 managed IP ethernet switch is ideal for implementing a ring or hybrid network with the OptiFlex dual IP controllers. The IPS1-4 features four gigabit ethernet ports that support Rapid Spanning Tree Protocol (RSTP) for a completely redundant network connection. Rugged construction and din rail mounting make it well suited for panel installation in many HVAC applications.

KEY FEATURES AND BENEFITS

Application Features

- Redundancy: X-Ring Pro (ultra high-speed recovery time < 20 ms), RSTP/STP (802.1w/1D)
- Security: 802.1x (port-based, MD5/TLS/TTLS/PEAP encryption), RADIUS
- IXM function enables fast deployment
- Management: SNMP v1/v2c/v3, WEB, Telnet, standard MIB, private MIB
- 14°~140° F (-10°~60° C) operating temperature range
- Supports security pack to fight against internal and external cyber threats

Hardware Features

- 4 x 10/100 MB ethernet ports + 2 SFP ports
- Dual 12~48 VDC power input and 1 relay output for power failure notification
- 4 ethernet ports support auto negotiation, MDI/MDI-X function, full/half duplex
- SFP socket for easy and flexible fiber expansion (optional accessory)

WebCTRL®

The WebCTRL building automation system gives you the ability to understand your building operations and analyze the results. Integrate environmental, energy, security and safety systems into one powerful management tool that helps you reduce energy consumption, increase occupant comfort, and achieve sustainable building operations.

SPECIFICATIONS

Part #	IPS1-04 **Managed IP Ethernet Switch**
Power	Consumption: 5.28W @ 48 VDC (System); Input: 12~48 VDC redundant dual power input: Fault Output: 1 relay output 1A @ 24 VDC max Reverse polarity protection: Supported; Overload current protection: Supported
Communication	
I/O Port	4 x 10/100/1000 BASE T/TX RJ-45; 2 x SFP (mini-GBIC) port
Console Port	RS-232 (RJ45)
Power Connector	6-pin screw terminal block (including relay)
LED Display	System LED: PWR1, PWR2, SYS, Alarm and R.M.; Port LED: Link/Speed/Activity
Environmental Range	Operating Temperature: 14°F to 140°F (-10 to 60°C) Storage Temperature: -40°F to 185°F (-40 to 85°C) 10–95% relative humidity, non-condensing
Physical	Metal shell enclosure rated IP30 for DIN-rail installation; Switch fabric speed: 12Gbps; Jumbo frame: 9,216 bytes
Certification	EMI: CE, FCC Class A Safety: UL61010, EN LVD62368-1 EMC: EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-4-5, EN61000-4-6, EN61000-4-8 Shock: IEC60068-2-27 Freefall: IEC60068-2-32 Vibration: IEC60068-2-6 Railway Trackside: EN50121-4
L2 Features	L2 MAC address: 8k Packet buffer: 4.1 Mbit VLAN Group: 256 (VLAN ID 1~4094) VLAN arrange: Tag-based VLAN, Q-in-Q (VLAN stacking), GVRP Port Mirroring: Per port, multi-source port IP Multicast: IGMP snooping v1/v2/v3, MLD snooping, IGMP immediate leave Storm control: Broadcast, multicast, unknown, unicast Redundancy: IEEE802.1D-STP, IEEE802.1s-MSTP, IEEE802.1w-RSTP, X-Ring Pro, with ultra-high speed, recovery time less than 20ms IEEE Standard: 802.3, 802.3u, 802.3ab, 802.3x, 802.3z, 802.1D, 802.1w, 802.1p, 802.1Q, 802.1x, 802.3ad
QoS	Priority queue: WRR (weighted round robin), SP (strict scheduling priority), hybrid priority Class of service: IEEE 802.1p based CoS, IP TOS, DSCP based CoS Rate limiting: Ingress rate limit, egress rate limit Link aggregation: IEEE 802.3ad dynamic port trunking, static port trunking
Security	Port security: Static, dynamic IP source guard, ARP spoofing prevention, access control list, DHCP snooping Authentication: 802.1x (port-based, MD5/TLS/TTLS/PEAP encryption, TACACS+
Management	DHCP: client, server, option 66/67/82; Access: SNMP, v1/v2c/v3, WEB, Telnet, RMON, standard MIB, private MIB Security access: SSH2.0, SSL; Software upgrade: TFTP, HTTP, dual image; NTP: SNTP client
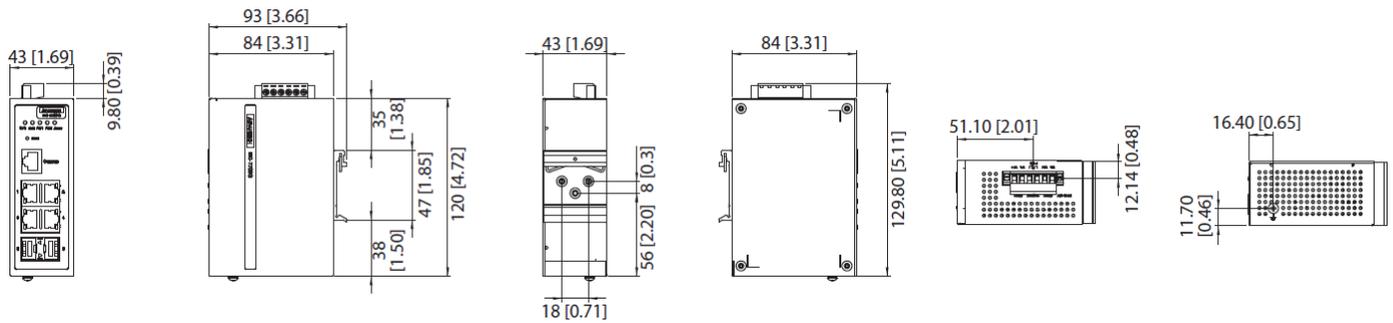
Panel Cut-Out Dimensions: 84 x 120 x 43 mm (3.31" x 4.72" x 1.69")