Monitored Ethernet Switches 5 & 8 port, SNMP, Modbus/TCP

Models SE305-T, SE308-T







Features & Benefits

- Communicates with HMI/SCADA software via Modbus/TCP
- Integrated with iView² SNMP Management Software (free download)
- Energy Efficient Ethernet (EEE), IEEE 802.3az for low energy consumption
- Wide temperature range -40 to 75°C
- DIN rail or wall/panel mountable
- Dual 12 to 48 VDC power inputs for redundancy
- **EMS Level 3 Protection**
- Designed for hazardous locations: UL C1D2, ATEX Zone 2 (pending), IECEx (pending)
- · Port-based QoS feature for deterministic data transmission
- Loop detection and event alarm
- Power failure indicated by a relay and LED indicator









Introduction

SE300 series is the industry's first design for Ethernet Green, IEEE802.3az - Energy Ethernet switches that cut power usage by up to 60%, significantly saving energy usage in the field and reducing total cost of ownership over 24/7.

Advantech B+B SmartWorx SE300 series monitored switches can be used as plugand-play unmanaged switches right out of the box. Installing the iView² Network Management Software gives them basic monitoring and management capabilities as well. They bridge the gap between unmanaged switches and significantly more expensive, fully managed solutions.

When enabled with iView², these switches provide IP address assignment, allowing for a static IP address or an address that is discoverable via DHCP in the network. Then, these switches have the ability to use Modbus/TCP to communicate with HMI/SCADA software and SNMP to communicate with NMS (Networking Management Software) at the same time. This gives full access control to both control engineers and IT managers.

Specifications

COMMUNICATIONS					
Standards	IEEE 802.3, 802.3u, 802.3x, 802.1p, 802.3az				
LAN	10/100Base-T(X)				
Transmission Distance	Up to 100 meters				
Transmission Speed	100 Mbps				
INTERFACE					
Connectors	SE305-T: 5 x RJ45. SE308-T: 8 x RJ45 6-pin removable screw terminal (power & relay)				
Ethernet	Auto Sensing, 10/100BaseTX, Duplex and MDIX				
LED Indicators	P1, P2, P-Fail, Loop detection 10/100T (X): Link/Activity, Speed				

Basic Monitoring & Management Capabilities

iView² gives network managers the ability to monitor and manage eWorx SE300 series switches from a central location. It features an intuitive Graphical User Interface (GUI) that provides a real-life representation of all installed eWorx SE300 Series switches, displaying device functions, port settings, device status information and traffic statistics via SNMP.

iView² can also configure eWorx SE300 series switches monitoring capabilities for automation applications via the popular Modbus TCP/IP protocol. Control engineers can use existing HMI/SCADA software to integrate the network status by creating extra tags for real-time monitoring, iView² is a standalone software that supports multiple platforms and operating systems.

iView² Features for eWorx SE300 series Switches Monitoring:

- System information (IP/MAC address)
- Port status
- Port speed
- · Flow control
- Link up counter
- •TX packets counter, RX packets counter
- TX error packets counter, RX error packets counter
- Firmware version
- PoE status (PoE model/s only)

Management:

- · Configure IP mode
- Set IP address
- Set TCP Modbus/TCP time-out
- Create Community Strings
- Configure Traps

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Specifications - continued

SWITCH PROPERTIES				
MAC Table Size	SE305-T: 2k. SE308-T: 8k			
Packet Buffer Size	SE305-T: 1M bit. SE308-T: 128K bit			
Switching Capacity	SE305-T: 1Gbps. SE308-T: 1.6 Gbps			
Jumbo Frame	SE305-T: 9216 bytes. SE308-T: 2048 bytes			
POWER				
Power Consumption	SE305-T: Max. 2W. SE308-T: Max. 3.6W			
Power Input	12~48 VDC (8.4~52.8 VDC) redundant dual inputs			
Fault Output	1 Relay Output			
Reverse Polarity Protection	Present			
Overload Current	Present			
PHYSICAL				
Dimensions (WxHxD)	SE305-T: 27x120x84 mm. SE308-T: 43x120x84 mm			
Enclosure	IP30, metal shell with solid mounting kits			
Mounting	DIN-Rail, Wall			

Specifications - continued

Specifications	continucu			
ENVIRONMENT				
Operating Temperature	-40 ~ 75°C (-40 ~ 167°F)			
Storage Temperature	-40 ~ 85°C (-40 ~ 185°F)			
Operating Humidity	10 ~ 95% (non-condensing)			
Storage Humidity	10 ~ 95% (non-condensing)			
MTBF	SE305-T: 5,168,110 hours. SE308-T: 5,235,270 hours			
CERTIFICATIONS				
Hazardous Environments	UL Class 1 Division 2 Groups A,B,C,D; ATEX Zone 2 (pending); IECEx (pending)			
Safety	UL508			
EMI	FCC Part 15 Subpart B Class A, EN 55011/55022, Class A			
EMS	EN 61000-4-2 (Level 3), EN 61000-4-3 (Level 3) EN 61000-4-4 (Level 3), EN 61000-4-5 (Level 3) EN 61000-4-6 (Level 3), EN 61000-4-8 (Level 3)			
Shock	IEC 60068-2-27			
Freefall	IEC 60068-2-32			
Vibration	IEC 60068-2-6			

SOFTWARE	
Management	iView², LLDP, SNMP v1/v2c, Modbus/TCP
Configuration	Static IP address, DHCP Client
Monitoring	Port Statistics (Speed/Status), Link Up/Down counter, Error Packet counter, Loop detection
Filter	Flow control, IEEE 802.1p QoS (Strict mode), Broadcast storm protection
Industrial Profiles	Modbus/TCP profiles included - Configuration and Diagnostic via automation software tools like e.g. Wonderware InTouch, STEP7, InduSoft Web Studio

IVIEW ² - NETWORK MANAGEMENT SOFTWARE - FREE DOWNLOAD					
Version	iView ² Web-based Application				
OS Support	32-bit/64-bit Windows XP/Vista/7, Windows Server 2003/2008/2008 R2				
Operation Modes	Local Computer or Remote Server				
Web Browser	Microsoft® IE, Chrome, Firefox				
Protocol	SNMPv1 and SNMPv2c				

Product Ordering Information

		RJ45		FIBER					
MODEL#	DESCRIPTION	OPERATING TEMPERATURE	10/100 MBPS	GIGABIT	100FX	100/1000BASE-SFP	COMBO PORT, 10/100/1000BASE-T(X) OR 100/1000BASE-SFP	ТҮРЕ	CONNECTOR
SE305-T	5-port 10/100 Monitored Ethernet Switch	-40∼75°C	5	-	-	-	-	-	-
SE308-T	8-port 10/100 Monitored Ethernet Switch	-40∼75°C	8	-	-	-	-	-	-

Accessories - optional

Accessories e	ptional
MODEL#	DESCRIPTION
MDR-40-24	DIN Rail Power supply, 24VDC 40 Watt
C5UMB3FBG	3 ft. (1 M), Gray, Category 5e UTP Patch Cord
C5UMB7FBG	7 ft. (2 M), Gray, Category 5e UTP Patch Cord

Package Checklist

Ethernet Switch, Quick Start Guide, DIN-Rail mount bracket (installed), Wall mount bracket

Limited lifetime warranty for Advantech B+B designed and/or manufactured products.

Model SE305-T Mechanical Diagram | DIN Rail & Panel Mount Options

Units = [inches] mm



