

Monitored Ethernet Switch

10 port, Gigabit, PoE+, SNMP, Modbus/TCP

Model SEGP310-T

B+B SMARTWORX

Powered by

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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
- Redundant dual 12 to 48VDC power inputs
- 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



SNMP



Introduction

SE300 series is the industry's first design for Ethernet Green®, IEEE802.3az - Energy Efficient 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 plug-and-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.

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

Specifications

COMMUNICATIONS	
Standards	IEEE 802.3af/at, 802.3, 802.3u, 802.3ab, 802.3az, 802.3x, 802.1p
LAN	10/100/1000Base-T(X)
Transmission Distance	Up to 100 meters
Transmission Speed	1000 Mbps
INTERFACE	
Connectors	8 x 10/100/1000 BaseT(X) with PoE + 2 x 10/100/1000 BaseT(X) 6-pin removable screw terminal (power & relay)
LED Indicators	P1, P2, P-Fail, Loop Detection 10/100/1000T (X): Link/Activity, Speed, PoE Port
SWITCH PROPERTIES	
MAC Address	8k entries
Packet Buffer	4.1 M bit
Switching Capacity	20 Gbps

All product specifications are subject to change without notice.

SEGP310-T_1917

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Specifications - continued

POWER	
Power Consumption	65 Watts
Power Input	12~24 VDC (9~36 VDC) redundant dual inputs
Fault Output	1 Relay Output
Reverse Polarity Protection	Present
Overload Current	Present
POE+	
PoE+ Standard	IEEE802.3af/at (Alternative A)
PoE+ Pins	With data pairs, 1, 2 and 3, 6
PoE+ Power Budget	Switch - 60W maximum Ports - 30W, maximum
PHYSICAL	
Dimensions (WxHxD)	74 x 152 x 105 mm (2.91 x 5.98 x 4.14 inch)
Enclosure	IP30, metal/aluminum shell with solid mounting kits
Mounting	DIN-Rail, Panel

Specifications - continued

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	2,788,343 hours
CERTIFICATIONS	
Hazardous Environments	UL Class 1 Division 2 Groups A,B,C,D; ATEX Zone 2 (pending); IECEx (pending)
Safety	CE, FCC, e-Mark
EMI	EN 55011/ 55022 Class A, EN 61000-6-4, FCC Part 15 Subpart B Class A
EMS	EN 55024/ EN 61000-6-2, EN 61000-4-2 (ESD) Level 3
	EN 61000-4-3 (RS) Level 3, EN 61000-4-4 (EFT) Level 3
	EN 61000-4-5 (Surge) Level 3, EN 61000-4-6 (CS) Level 3
	EN 61000-4-8 (Magnetic Field) Level 3
Shock	IEC 60068-2-27
Freefall	IEC 60068-2-32
Vibration	IEC 60068-2-6

SOFTWARE	
Management	iView ² , 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

MODEL #	DESCRIPTION	OPERATING TEMPERATURE	RJ45		FIBER				
			10/100 MBPS	GIGABIT	100FX	100/1000BASE-SFP	COMBO PORT, 10/100/1000BASE-T(TX) OR 100/1000BASE-SFP	TYPE	CONNECTOR
SEGP310-T	8-port Gigabit PoE+ and 2-port Gigabit Monitored Ethernet Switch	-40~75°C	-	10 (8 PoE+)	-	-	-	-	-

Accessories - optional

MODEL #	DESCRIPTION
SDR-240-24	DIN rail power supply, 10A, 240W, 24VDC, 10A
CSUMB3FBG	3 ft. (1 m), Gray, Category 5e UTP Patch Cord
CSUMB7FBG	7 ft. (2 m), Gray, Category 5e UTP Patch Cord
808-38200	IE-SFP 1250 Mbps to 1.25 Gbps (OC-24), SM1310-LC, 20km
808-38201	IE-SFP 1250 Mbps to 1.25 Gbps (OC-24), MM850-LC, 2250/550m
808-38203	IE-SFP 1250 Mbps to 1.25 Gbps (OC-24), SM1310/PLUS-LC, 30km

Package Checklist

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

Warranty

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

Model SEGP310-T Mechanical Diagram | DIN Rail Mount Option

Units = [inches] mm

