# imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



# Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832 Email & Skype: info@chipsmall.com Web: www.chipsmall.com Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



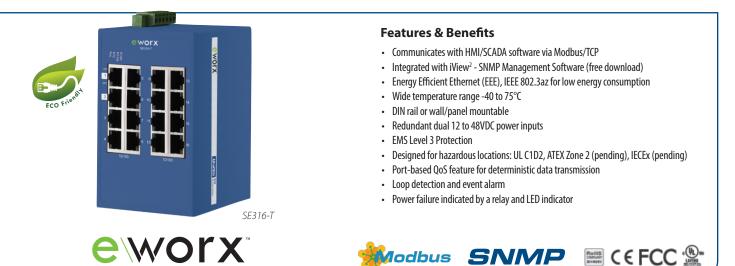
### Monitored Ethernet Switch 16 port, SNMP, Modbus/TCP

Model SE316-T

## B-B SMARTWORX

**AD\ANTEC** 

Powered by



#### Introduction

SE300 series is the industry's first design for Ethernet Green<sup>®</sup>, 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 iView<sup>2</sup> 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 iView<sup>2</sup>, 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, 802.3ab			
LAN	10/100Base-T(X)			
Transmission Distance	Up to 100 meters			
Transmission Speed	100 Mbps			
INTERFACE				
Connectors	16 x RJ45 6-pin removable screw terminal (power & relay)			
Ethernet	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**

iView<sup>2</sup> 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.

iView<sup>2</sup> 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. iView<sup>2</sup> is a standalone software that supports multiple platforms and operating systems.

### iView<sup>2</sup> 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

## **Monitored Ethernet Switch** 16 port, SNMP, Modbus/TCP

Model SE316-T

### **Specifications - continued**

Specifications - continued		Specifications - continued				
SWITCH PROPERTIES		ENVIRONMENT				
MAC Table Size	8k	Operating Temperature	-40 ~ 75°C (-40 ~ 167°F)			
Packet Buffer Size	128K bit	Storage Temperature	-40 ~ 85°C (-40 ~ 185°F)			
Switching Capacity	3.2 Gbps	Operating Humidity	10 ~ 95% (non-condensing)			
Jumbo Frame	2048 bytes	Storage Humidity 10 ~ 95% (non-condensing)				
POWER		MTBF	4,653,552 hours			
Power Consumption Max. 3.84W		CERTIFICATIONS				
Power Input	12~48 VDC (8.4~52.8 VDC) redundant dual inputs	Hazardous Environments UL Class 1 Division 2 Groups A,B,C,D; ATEX Zone 2 (pending); IECEx (p				
Fault Output	1 Relay Output	Safety	UL508			
<b>Reverse Polarity Protection</b>	Present	EMI	FCC Part 15 Subpart B Class A, EN 55011/55022, Class A			
Overload Current Present		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)			
PHYSICAL			EN 61000-4-6 (Level 3), EN 61000-4-8 (Level 3)			
Dimensions (WxHxD)	74 x 120 x 84 mm	Shock	IEC 60068-2-27			
Enclosure	IP30, metal shell with solid mounting kits	Freefall	IEC 60068-2-32			
Mounting DIN-Rail, Wall		Vibration	IEC 60068-2-6			

SOFTWARE	
Management	iView <sup>2</sup> , 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 <sup>2</sup> - NETWORK MANAGEMENT SOFTWARE - FREE DOWNLOAD				
Version	iView <sup>2</sup> 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	TYPE	CONNECTOR
SE316-T	16-port 10/100 Mbps Monitored Ethernet Switch	-40~75°C	16	-	-	-	-	-	-

#### **Accessories - optional**

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

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



# Model SE316-T Mechanical Diagram | DIN Rail & Wall Mount Mount Options Units = [inches] mm

