



## 8\*10/100Base Web Smart PoE extended temperature Ethernet Switch

### OVERVIEW:

The SWK-A0 series PoE Web Smart Ethernet Switch series is designed to operate in the harsh environments at the edge of the network. The SWK-A0 series functions at temperature ranging from -40°C to 75°C (-40°F to 167°F) and is tested for functional operation @-40°C to 85°C (-40°F to 185°F). Whether on the factory floor or the street corner, the SWK-A0 series will provide flawless communications when you need it most. The SWK-A0 series is a Switch with the flexibility of eight Ethernet ports that

may be configured in various combinations of copper and fiber optic interfaces. The SWK-A0 series may be DIN- Rail, Panel, or Rack mounted, and comes with Terminal Block and Power Jack power inputs. Port 1 ~ port 4 on SWK-A0 series supports IEEE802.3af Power over Ethernet (PoE) Power Sourcing Equipment (PSE) and can detect an IEEE802.3af compliant Powered Device (PD). Using external 48VDC power inputs through Terminal Block or Power Jack, data and power can be transmitted to a Powered Device (PD) over the same twisted-pair Ethernet cable through port 1 ~ port 4 on SWK-A0 SERIES. The SWK-A0 series provides a Web browser interface that allows the user to configure IP settings, Port based VLAN, QoS settings, and load default settings as well as indicate the status of the switch such as PoE conditions, Link status and Alarm conditions.

### FEATURES:

- Complies with **NEMA TS1 & TS2** Environmental requirements for Traffic control equipment
- Complies with **IEC61000-6-2** EMC Generic standard immunity for Industrial environment
- Supports **IEEE802.3af** Power over Ethernet (PoE) Power Sourcing Equipment (PSE)
- Power status, PoE status, Link status, and Alarm condition of relay through the Web browser Interface
- System, IP Configuration, Port-based VLAN, QoS Mode, QoS Priority and Load Default setting through the Web browser Interface
- 1024 MAC addresses; 1M bits buffer memory; 10/100Mbps-Full/Half-duplex, Auto Negotiation, Auto-MDI/MDIX; Full wire-speed forwarding rate
- Alarms for power and port link failure by relay output
- Redundant power inputs with Terminal Block and DC Jack
- -40°C to 75°C (-40°F to 167°F) operating temperature range
- Hardened aluminum case; Supports DIN-Rail, Panel Mounting installation

### SPECIFICATIONS:

#### Technology

#### Standards:

- IEEE802.3 10Base-T, IEEE802.3u  
100Base-TX/FX, IEEE802.3x, IEEE802.3af

#### Forward and Filtering Rate:

- 14,880pps for 10Mbps
- 148,810pps for 100Mbps

#### Packet Buffer Memory:

- 1M bits

#### Processing Type:

- Store-and-Forward
- Half-duplex back-pressure and IEEE802.3x full-duplex flow control

#### Address Table Size:

- 1024 MAC addresses

#### Power

##### Input:

- Input Voltage: 48VDC(Terminal Block; DC Jack)

##### Power Consumption:

- 72W Max. 1.5A@48VDC

##### Power Supply References:

- Terminal Block: 48VDC, 2.5A
- DC Jack: 48VDC, 2.5A

##### Overload Current Protection:

- Present

##### Reverse Polarity Protection:

- Present

#### Mechanical

##### Casing:

- Aluminum case
- IP30

##### Dimensions:

- 68mm (W) x 110mm (D) x 135mm (H)
- (2.68" (W) x 4.33" (D) x 5.31" (H))

##### Weight:

- 1Kg (2.2lbs.)

##### Installation:

- DIN-Rail, Panel Mounting

#### Interface

##### Ethernet Port:

- 10/100Base-TX: 8, 7 or 6 ports
- 100Base-FX: 0, 1 or 2 ports

##### LED Indicators:

- Per Unit: Power Status (Power 1, Power 2, Power 3)
- Per Port: 10/100TX, 100FX: Link/Activity (Green)
- PoE: Link (Amber)

##### Alarm Contact:

- One relay output with current 0.1A @ 24VDC

#### Environment

##### Operating Temperature:

- -40°C to 75°C (-40°F to 167°F)
- Tested @ -40°C to 85°C (-40°F to 185°F)

##### Storage Temperature:

- -40°C to 85°C (-40°F to 185°F)

##### Ambient Relative Humidity:

- 5% to 95% (non-condensing)

#### Regulatory Approvals:

##### ISO:

- Manufactured in an ISO9001 facility

##### Safety:

- UL508, EN60950-1, IEC60950-1

##### EMI:

- FCC Part 15, Class A
- EN61000-6-3
  - EN55022
  - EN61000-3-2
  - EN61000-3-3

##### EMS:

- EN61000-6-2
  - EN61000-4-2 (ESD Standards)  
Contact: + / - 4KV; Criteria B  
Air: + / - 8KV; Criteria B
  - EN61000-4-3 (Radiated RFI Standards)  
10V/m, 80 to 1000MHz; 80% AM Criteria A
  - EN61000-4-4 (Burst Standards)  
Signal Ports: + / - 4KV; Criteria B  
D.C. Power Ports: + / - 4KV; Criteria B  
A.C. Power Ports: + / - 4KV; Criteria B
  - EN61000-4-5 (Surge Standards)  
Signal Ports: + / - 1KV; Line-to-Line; Criteria B  
D.C. Power Ports: + / - 0.5KV; Line-to-earth; Criteria B  
A.C. Power Ports: + / - 2KV; Line-to-earth; Criteria B
  - EN61000-4-6 (Induced RFI Standards)  
Signal Ports: 10Vrms @ 0.15~80MHz; 80% AM Criteria A  
D.C. Power Ports: 10Vrms @ 0.15~80MHz; 80% AM Criteria A  
A.C. Power Ports: 10Vrms @ 0.15~80MHz; 80% AM Criteria A
  - EN61000-4-8 (Magnetic Field Standards)  
30A/m @ 50, 60Hz; Criteria A
  - EN61000-4-11 (Voltage Dip Standards)  
A.C. Power Ports: 30% Reduction for 0.5 period; Criteria B

##### Environmental Test Compliance:

- IEC60068-2-6 Fc (Vibration Resistance)  
5g@10~150KHz, Amplitude0.35mm  
(Operation / Storage / Transport)
- IEC60068-2-27 Ea (Shock)  
25g@11ms (Half-Sine Shock Pulse; Operation)  
50g@11ms (Half-Sine Shock Pulse;  
Storage/Transport)
- IEC60068-2-32 Ed (Free Fall)  
1M (3.281ft.)

## ORDERING INFORMATION:

SWK-A0008E-P4	8*10/100TX extended temperature Web Smart PoE Ethernet Switch
SWK-A0206E-M-SC-P4	6*10/100TX +2*100FX(Multi mode,SC,2Km) extended temperature Web Smart PoE Ethernet Switch
SWK-A0206E-S-SC20-P4	6*10/100TX +2*100FX(Single mode,SC,20Km) extended temperature Web Smart PoE Ethernet Switch

## POWER INPUT INTERFACE:

Terminal Block & DC Jack

## INSTALLATION TYPE:

DIN Rail (mounting kit is included)