## **SUI-Al** series





# 16 \* 10/100Base extended temperature Unmanaged Industrial Ethernet Switch OVERVIEW:

The SUI-A1 series Ethernet switches are designed to operate in the harsh environments at the edge of the network. The SUI-A1 series functions at temperatures ranging from -40 $^{\circ}$ C to 75 $^{\circ}$ C and is tested for functional operation @ -40 $^{\circ}$ C to 85 $^{\circ}$ C, whether on the factory floor or the street corner, the SUI-A1 series will provide flawless communications when you need it most. The SUI-A1 series is a switch with the flexibility of sixteen 10/100TX Ethernet ports that may be configured in various combinations of

copper and fiber optic interfaces. It provides fourteen 10/100TX copper ports plus two 100FX ports. Flexibility is the main feature of the SUI-A1 series, it may be DIN rail or panel mounted

#### **FEATURES:**

- Complies with NEMA TS1 & TS2 Environmental requirements for Traffic control equipment
- Complies with IEC61000-6-2 EMC Generic standard immunity for Industrial environment
- 4096 MAC addresses
- 1.625M bits buffer memory
- 10/100Mbps-Full/Half-duplex, Auto-Negotiation, Auto-MDI/MDIX
- Full wire-speed forwarding rate
- Alarms for power failure by relay output
- Redundant 12 ~ 48VDC Power inputs or 12VDC Jack
- $-40^{\circ}$ C to  $75^{\circ}$ C ( $-40^{\circ}$ F to  $167^{\circ}$ F) operating temperature range
- Rugged aluminum case
- Supports DIN-Rail, Panel Mounting installation

#### **SPECIFICATIONS:**

## **Technology** Standards:

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

#### **Forward and Filtering Rate:**

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

#### **Packet Buffer Memory:**

• 1.625M bits

#### **Processing Type:**

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

#### **Address Table Size:**

4096 MAC addresses

## Power Input:

 Input Voltage: 12 to 48VDC (Terminal Block);12VDC (DC Jack)

#### **Power Consumption:**

 8.4W Max , 0.7A @12VDC, 0.35A@24VDC,0.175A@48VDC

#### **Power Supply references:**

- Terminal Block :12 to 24 VDC, 1.5A
- DC Jack:12 VDC, 3A

## **SUI-Al series**



#### **Reverse Polarity Protection:**

Present

#### Mechanical

#### Casing:

- Aluminum case
- IP30

#### **Dimensions:**

• 75.5mm (W) x 110mm (D) x 135mm (H) (2.98" (W) x 4.33" (D) x 5.31" (H))

#### Weight:

• 0.87Kg (1.92lbs.)

#### Installation:

DIN-Rail, Panel Mounting

#### **Interface**

#### **Ethernet port:**

- 10/100Base-TX: 16, 15 or 14 ports
- 100Base-FX: 0, 1 or 2 ports

#### **LED Indicators:**

- Per Unit: Power Status (Power1, Power2, Power3)
- Per Port: 10/100TX, 100FX: Link/Activity

#### **Alarm Contact:**

One relay output with current 1A@24VDC

#### **Environment**

#### **Operating Temperature:**

• -40°C to 75°C (-40°F to 167°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)
    Enclosure Contact: + / 4KV; Criteria B
    Enclosure Air: + / 8KV; Criteria B
  - EN61000-4-3 (Radiated FRI Standards) Enclosure Ports: 10V/m, 80 to 1000MHz; Criteria A
  - EN61000-4-4 (Burst Standards)
    Enclosure Ports: +/- 4KV @ 2.5KHz;
    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-earth;

    Criteria B

    D.C. Power Ports: + / 0.5KV;

    Line-to-earth; Criteria B

Line-to-earth; Criteria B A.C. Power Ports: + / - 2KV; Line-to-earth; Criteria B

■ EN61000-4-6 (Induced RFI Standards)
Signal Ports: 10V @ 0.15 – 80MHz;
Criteria A
D.C. Power Ports: 10V @ 0.15 –

80MHz; Criteria A A.C. Power Ports: 10V @ 0.15 –

80MHz; Criteria A Earth Ground Ports: 10V @ 0.15 – 80MHz; Criteria A

■ EN61000-4-8 (Magnetic Field Standards)
Enclosure Ports: 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 (Vibration Resistance)
   5g @ 150Hz; Criterion 3 (Operation/Storage/Transport)
- IEC60068-2-27 (Shock)
   25g @ 11ms (Half-Sine Shock Pulse;
   Operation)
   50g @ 11ms (Half-Sine Shock Pulse;
   Storage/Transport)
- IEC60068-2-32 (Free Fall)
   1M (3.281ft.)

# **SUI-Al series**



#### **ORDERING INFORMATION:**

SUI-A1016E	16 * 10/100TX unmanaged Ethernet Switch
SUI-A1115E-M-SC	15 * 10/100TX + 1 * 100FX(multi mode, SC 2Km) unmanaged Ethernet Switch
SUI-A1115E-S-SC20	15 * 10/100TX + 1 * 100FX(single mode, SC 20Km) unmanaged Ethernet Switch

#### **POWER INPUT INTERFACE:**

Terminal Block & DC Jack

#### **INSTALLATION TYPE:**

Din Rail (mounting kit is included).