

iCON-32008 Series

8-port 10/100Base Hardened Unmanaged Switch (-40°C ~ +75°C)



Features



- Compliant with NEMA TS1 & TS2 environmental requirements for traffic control equipment
- UL1604 class 1, division 2 classified for use in hazardous environment
- 10/100Mbps-full/half-duplex, auto-negotiation, auto-MDI/MDIX full wire-speed forwarding rate
- Alarm for power and port link failure by relay output
- Redundant power inputs with terminal block or DC jack
- Operating temperature range of -40°C ~ +75°C (-40°F ~ +167°F)
- Supports Din-rail, panel mounting installation

Introduction

The iCON-32008 series is a hardened, non-managed 8-port switches which support operating temperature range of -40°C ~ +75°C. To enhance system reliability, this series offers redundant power and alarm for power failure and port link failure by relay output. Additionally, the iCON-32008 series passed UL1604 standard which is for operating in hazardous environments under explosive or flammable conditions. With these advantages, the iCON-32008 series is best suited for harsh applications, such as factory automation, power plant, oil, mining and more.

Wide operating temperature range supported (-40°C to +75°C)

The iCON-32008 series comprises of high quality components with wide operating temperature range and long MTBF. The housing is specially designed to dissipate heat efficiently, allowing system to operate under extremely high temperature conditions.

Certified for harsh environments: NEMA TS1/2 & UL 1604 & UL 60950

The iCON-32008 series meets NEMA TS1/2 standard for traffic control equipment, UL 1604 safety standard for hazardous environment of explosive or flammable

conditions, and UL60950 standard for information technology equipments. These certifications ensures that the iCON-32008 series is reliable and safe for using in industrial applications, such as building automation oil field automation, factory automation and ITS.

Redundant power input

The iCON-32008 series is equipped with two redundant power inputs which guarantees non-stop operation. The backup power input takes over immediately if the primary DC power input fails.

Relay output alarm for power failure and port break

The iCON-32008 series provides one relay output which can be set up to identify when power fails or port breaks. This feature allows the administrator to effectively respond to warning messages of power failure and port breaks.

Specifications

| Technology | | Power | |
|----------------------------|--|-----------------------------|--|
| Standards | IEEE802.3 10Base-T, IEEE802.3u 100Base-TX/100Base-FX, IEEE802.3x | Input | Input voltage: 12 to 48VDC (terminal block); 12VDC (DC jack) |
| Forward and Filtering Rate | * 14,880pps for 10Mbps * 148,810pps for 100Mbps | Power Consumption | 9.12W max. 0.76A @ 12VDC, 0.38A @ 24VDC, 0.19A @ 48VDC |
| Packet Buffer Memory | 768K bits | Power Supply References | * Terminal block: 12 to 24VDC, 1.5A * DC jack: 12VDC, 3A |
| Processing Type | * Store-and-Forward * Half-duplex back-pressure and IEEE802.3x full-duplex flow control | Overload Current Protection | Present |
| Address Table Size | 2048 MAC addresses | Reverse Polarity Protection | Present |
| Latency | Less than 7.1 μs | | |

| Mechanical | |
|-----------------------|--|
| Casing | * Aluminum case * IP20 |
| Dimensions | 50 mm (1.97") (W) x 110 mm (4.33") (D) x 135 mm (5.31") (H) |
| Weight | 0.8 kg (1.76 lb) |
| Installation | DIN-rail, panel mounting |
| Interface | |
| Ethernet Port | * 10/100Base-TX: 8, 6, 5 or 4 ports * 100Base-FX: 0, 1, 2 or 4 ports |
| LED Indicators | * Per unit: power status (power 1, power 2, fault) * Per port: 10/100TX, 100FX: link/activity (green), speed (yellow) |
| Alarm Contact | One relay output with current 1A @ 24VDC |
| Environment | |
| Operating Temperature | -40°C ~ +75°C (-40°F ~ +167°F) |
| Temperature Tested @ | -40°C ~ +85°C (-40°F ~ +185°F) |
| Storage Temperature | -40°C ~ +85°C (-40°F ~ +185°F) |
| Ambient Humidity | 5% ~ 95% (non-condensing) |
| Regulatory Approvals | |
| ISO | Manufactured in an ISO9001 facility |
| Safety | * Hazardous locations: class 1, division 2 group A,B,C & D * UL 60950-1, EN60950-1, IEC60950-1 |
| EMI | FCC part 15, class A, VCCI EN61000-6-3 *EN55022 *EN61000-3-2 *EN61000-3-3 |
| EMS | EN61000-6-2 *EN61000-4-2 (ESD standards) Contact: +/- 4 KV; criteria B Air: +/- 8 KV; criteria B *EN61000-4-3 (radiated RFI standards) 10 V/m, 80 to 1000MHz; 80% AM criteria A *EN61000-4-4 (burst standards) Signal ports: +/- 4 KV; criteria B D.C. power ports: +/- 4 KV; criteria B A.C. power ports: +/- 4 KV; criteria B |

| | |
|--------------------|--|
| | *EN61000-4-5 (surge standards) Signal ports: +/- 1 KV; line-to-line; criteria B D.C. power ports: +/- 0.5 KV; line-to-earth; criteria B A.C. power ports: +/- 2 KV; line-to-earth; criteria B *EN61000-4-6 (induced RFI standards) Signal ports: 10 Vrms @ 0.15 ~ 80 MHz; 80% AM criteria A D.C. power ports: 10 Vrms @ 0.15 ~ 80 MHz; 80% AM criteria A A.C. power ports: 10 Vrms @ 0.15 ~ 80 MHz; 80% AM criteria A *EN61000-4-8 (magnetic field standards) 30 A/m @ 50, 60 Hz; criteria A *EN61000-4-11 (voltage dip standards) A.C. power ports: 30% reduction for 0.5 period; criteria B |
| Environmental Test | IEC60068-2-6 Fc (vibration resistance) *5 g @ 10 ~ 150 KHz, amplitude 0.35 mm (operation/storage/transport) |
| Compliance | IEC60068-2-27 Ea (shock) *25 g @ 11 ms (half-sine shock pulse; operation) *50 g @ 11 ms (half-sine shock pulse; storage/transport) IEC60068-2-32 Ed (free fall) * 1 M (3.281 ft.) |

NEMA TS1/2 environmental requirements for traffic control equipment

Ordering Information

| | |
|-------------------|---|
| iCON-32008-00-1-A | 8-port 10/100Base-TX hardened unmanaged switch |
| iCON-32026-1A-1-A | 6-port 10/100Base-TX + 2-port 100Base-FX multi-mode (SC) hardened unmanaged switch |
| iCON-32026-2A-1-A | 6-port 10/100Base-TX + 2-port 100Base-FX single-mode (SC)-20 Km hardened unmanaged switch |
| iCON-32044-2A-1-A | 4-port 10/100Base-TX + 4-port 100Base-FX single-mode (SC) hardened unmanaged switch |
| 81323140000E | Panel mount kit for iCON-32000 |

Dimensions

