# 2104-63 industrial ethernet ring switch



## Key features

- Fault-tolerant self-Healing ring (SHR) with 30ms plus 5ms per hop recovery time
- Pre-configured from factory for SHR operation
- 10/100 Base-T(X) (RJ45), 100 Base-FX (SC or ST optical fiber connectors, Multi/Single Mode)
- Supports IEEE 802.3, 802.3u, 802.3z and 802.1p

## Overview

The EOTec 2104 is a rugged, high performance industrial Ethernet ring switch that is designed to fill the gap between unmanaged and managed Ethernet switches. It provides all the benefits of redundant ring topology operation, but at a significantly lower cost than managed switches. The 2104 features the simplicity of installation and operation of an unmanaged switch, while retaining many of the capabilities of a managed switch. It is pre-configured for ring topology and no setup or configuration is required. It doesn't require master switch selection or an IP address to operate in a redundant ring topology. Its ultra fast link loss recovery time ensures high reliability with minimal downtime.

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# Technical specification

**Further features**

- Intelligent store and forward, non-blocking
- Full/Half Duplex, MDI/MDIX auto crossover, auto negotiate, auto polarity
- Expandable up to 8 ports
- Long-haul transmit distances of 2, 15, 40 and 60km
- Real-time traffic prioritization
- 45mm wide, DIN rail mounted
- Universal redundant power supply available

- Low power consumption (8W)
- Power and switch status LED indicator
- Global ring status alarm LED indicator
- Expandable backplane
- Remote status monitoring using Modbus over Ethernet (UDP)
- Local and global relay alarm contacts
- Port status ACT and LINK LEDs combined into one LED per port
- Backplane port activity status LED indicator
- Two SC or ST 100base-FX (multi-mode and single mode) fiber optic ports
- Pre-configured for redundant self-healing ring operation

| Feature | Description |
|---|---|
| Fiber type | Single-mode |
| Connector type | SC |
| Port configuration | 4-port (2 RJ45 and 2 fiber) |
| Power requirements | 15-40 Vdc via screw terminals |
| Maximum transmission distance | 60km |
| Operating temperature range | -40 to +85°C |
| Approvals | Class 1, Division 2, Groups A, B, C, D - CE marked |
| Acessories | <ul><li>Optional power supply modules: 2A06, 2A16</li><li>Expansion modules for additional ports: 2E54, 2E56, 2E58, 2E60, 2E62, 2E52</li></ul> |
| User manual | Shipped with product or available on request |

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## About Ultra Energy

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Part of Ultra Group, a global electronics company, Ultra Energy has worked with nuclear and industrial customers for over 60 years. We support customers across the world from facilities located in the US and UK. Our solutions are embedded in strategic national infrastructure and our people are active partners in customer programs that are focused on delivering advanced future nuclear and industrial capabilities.

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