Guardmaster 440R-ENETR EtherNet/IP Network Interface



Seamlessly Communicates Real-time Terminal-level Diagnostics to Help Increase Productivity

Features and Benefits

Enhanced flexibility

- Connectivity for Guardmaster Safety Relays to EtherNet/IP networks
- Optical link technology means no physical connectors
- Compliant with ODVA requirements for linear, star and ring EtherNet/IP network topology
- Integrates GuardLink[™]-enabled safety relays and devices into the Connected Enterprise

Optimized cost savings, minimized downtime

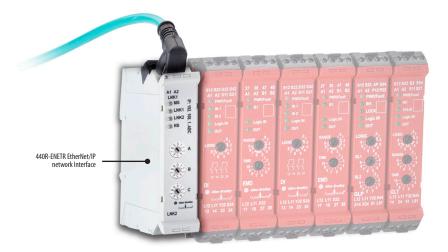
- Real-time terminal-level diagnostics
 of your safety system help to
 minimize unplanned downtime
- Connect up to six Guardmaster safety relays on a single network interface
- Removable terminations
 accelerate commissioning

Easy-to-use, compact solution

- No routing tables and network scheduling required
- Fast, simple configuration and integration
- Full Add-on Profile for Studio 5000[®] Logix Designer software, no other software is needed
- Slim, 22.5 mm wide DIN Rail mounted design

What is GuardLink?

 GuardLink is a safety-based communications protocol that links safety to The Connected Enterprise. Allen-Bradley[®] Guardmaster[®] smart safety devices featuring GuardLink technology deliver information, advanced functionality and flexibility, while enhancing safety and increasing efficiency machine- and plant-wide.



The Guardmaster[®] EtherNet/IP[™] Network Interface (440R-ENETR) allows Guardmaster Safety Relays with embedded optical bus technology to seamlessly communicate on an EtherNet/IP network. The information gathered from the GSR intelligent safety relays by way of E/IP Interface helps minimize unplanned downtime and increase efficiencies for startup. Up to six Guardmaster safety relays are easily connected to a single network interface providing a compact solution for your application.

As part of the Rockwell Automation Integrated Architecture® system, the Guardmaster EtherNet/IP Network Interface provides comprehensive real-time terminal-level diagnostics (such as cross faults and over currents) making it simple to troubleshoot your application. Additionally, a truly connected enterprise has real-time control and information available across platforms and devices within the organization. When it comes to linking safety to The Connected Enterprise, our smart safety devices featuring GuardLink technology can deliver information, advanced functionality and flexibility, while enhancing safety and increasing efficiency machine- and plant-wide.

Compliant with ODVA requirements for linear, star and ring EtherNet/IP architectures, the Guardmaster EtherNet/IP Network Interface provides greater system reliability and availability, while maximizing uptime and system performance.

Regardless of the application, the Guardmaster EtherNet/IP Network Interface brings the power of the Integrated Architecture to the monitored safety device in a slim, easy-to-use profile.





General Order Information

Catalog Number	Description	
440R-ENETR	Guardmaster dual port EtherNet/IP [™] Network Interface	
1585J-M8TBJM-2	Straight Male RJ45 to Straight Male RJ45 Ethernet Patchcord, 8 conductor (4-pair), Cat 5e, TPE, 2 m length 1	
1585J-E8TBJM-2	Right Angle Male RJ45 to Straight Male RJ45 Ethernet Patchcord, 8 conductor (4-pair), Cat 5e, TPE, 2 m length ²	
1585J-L8TBJM-2	Left Angle Male RJ45 to Straight Male RJ45 Ethernet Patchcord, 8 conductor (4-pair), Cat 5e, TPE, 2 m length ³	
Supported Guardmaster Safety Relays		
440R-D22R2	Guardmaster Safety Relay DI	Firmware V2 or later
440R-D22S2	Guardmaster Safety Relay DIS	
440R-EM4R2	Guardmaster Safety Relay EM	
440R-EM4R2D	Guardmaster Safety Relay EMD	
440R-GL2S2P	Guardmaster Safety Relay GLP	
440R-GL2S2T	Guardmaster Safety Relay GLT	
440R-DG2R2T	Guardmaster Safety Relay DG	440R-ENETR series B required
440R-S12R2	Guardmaster Safety Relay SI	

¹ All Ethernet Media Cables are available in 0.1 m increments up to 80 m.

² Recommended for RJ45 connection located at the top of the Guardmaster EtherNet/IP Network Interface.

³ Recommended for RJ45 connection located at the bottom of the Guardmaster EtherNet/IP Network Interface.

The GuardLink Safety System

- · Safety, diagnostics, remote reset and lock command over one cable
- Up to 32 devices per link (such as guardlocking switches, light curtains and e-stops)
- 100 m link distance (max 30 m between devices)
- · Chain topology with standard 4 (trunk) or 5 (drop) conductor patchcords
- Plug and play, no configuration required
- TÜV certified PLe
- Integrated with the Connected Enterprise via the 440R-ENETR EtherNet/IP network interface (Series B)



The interlock or E-Stop is connected to a GuardLink enabled connection tap that features local safety diagnostics in a trunk and drop topology. The taps are connected together in a series using standard 4-wire cables with M12 connectors. The linked system is then interfaced to the Guardmaster DG Dual GuardLink safety relay and to the Connected Enterprise via the 440R-ENETR EtherNet/IP interface.

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