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

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>440R-ENETR</td>
<td>Guardmaster dual port EtherNet/IP™ Network Interface</td>
</tr>
<tr>
<td>1585J-M8TBJM-2</td>
<td>Straight Male RJ45 to Straight Male RJ45 Ethernet Patchcord, 8 conductor (4-pair), Cat 5e, TPE, 2 m length ¹</td>
</tr>
<tr>
<td>1585J-E8TBJM-2</td>
<td>Right Angle Male RJ45 to Straight Male RJ45 Ethernet Patchcord, 8 conductor (4-pair), Cat 5e, TPE, 2 m length ²</td>
</tr>
<tr>
<td>1585J-L8TBJM-2</td>
<td>Left Angle Male RJ45 to Straight Male RJ45 Ethernet Patchcord, 8 conductor (4-pair), Cat 5e, TPE, 2 m length ³</td>
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</tbody>
</table>

Supported Guardmaster Safety Relays

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Description</th>
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<tbody>
<tr>
<td>440R-D22R2</td>
<td>Guardmaster Safety Relay DI</td>
</tr>
<tr>
<td>440R-D22S2</td>
<td>Guardmaster Safety Relay DIS</td>
</tr>
<tr>
<td>440R-EM4R2</td>
<td>Guardmaster Safety Relay EM</td>
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<tr>
<td>440R-EM4R2D</td>
<td>Guardmaster Safety Relay EMD</td>
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<tr>
<td>440R-GL2S2P</td>
<td>Guardmaster Safety Relay GLP</td>
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<tr>
<td>440R-GL2S2T</td>
<td>Guardmaster Safety Relay GLT</td>
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<tr>
<td>440R-DG2R2T</td>
<td>Guardmaster Safety Relay DG</td>
</tr>
<tr>
<td>440R-S12R2</td>
<td>Guardmaster Safety Relay SI</td>
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</tbody>
</table>

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.