The EIGR-E series consists of high-speed routers that link two 10/100/1000 Mbps Internet Protocol (IPv4) networks — passing appropriate traffic while blocking all other traffic. One network is the local-area-network (LAN); the other is the wide-area-network (WAN). The built-in stateful firewall passes communication initiated on the LAN-side while blocking WAN-side initiated communication. With Port Address Translation (PAT), LAN-side clients can access the Internet. Network Address Translation (NAT) allows a one-to-one translation between LAN-side and WAN-side devices. With Port Forwarding, LAN-side devices can be accessed from the Internet. The EIGR-E incorporates a four-port Ethernet switch for multiple LAN-side connections. An external Ethernet-based modem — cable or DSL — can be used to connect to the Internet. DSL modems connect via the PPPoE protocol. The EIGR-E operates over 0 to 60°C temperature range and the EIGR-EX operates over −40 to +75°C temperature range.

**EIGR-E Skorpion Gigabit IP Router Features...**

- Web page configuration
- 10/100/1000 Mbps WAN port
- 4-port 10/100/1000 Mbps Ethernet LAN switch
- PAT, NAT, Port Forwarding and Port Range Forwarding
- NAT Loopback
- Remote Router Access
- Allowlist
- Stateful firewall
- DHCP client (WAN) and DHCP server (LAN)
- DIN-rail mounting
- Diagnostic LEDs
- CE Mark, RoHS, UL 508, C22.2 No. 142-M1987
- 24 VAC/VDC powered
- Operates over 0 to 60°C (EIGR-E)
- Operates over −40 to +75°C (EIGR-EX)
EIGR-E — Skorpion Gigabit IP Router

Although the EIGR-E has many of the same features found in high-end routers, it is simpler to install and commission. A resident DHCP server on the LAN-side will provide IP addresses to LAN-side clients while a DHCP client on the WAN-side will accept IP address assignments from the attached network. Static addressing is accommodated as well. Configuration is via a web browser using authentication. With a DIN-rail mounting clip, rugged metal enclosure and the ability to be powered from a low-voltage AC/DC power source, the EIGR-E is ideal IP router for automation systems.

**Connector Pin Assignments**

**Ethernet RJ-45 Pin Assignments**

<table>
<thead>
<tr>
<th>Pin</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>BI_DA+</td>
</tr>
<tr>
<td>2</td>
<td>BI_DA-</td>
</tr>
<tr>
<td>3</td>
<td>BI_DB+</td>
</tr>
<tr>
<td>4</td>
<td>BI_DC+</td>
</tr>
<tr>
<td>5</td>
<td>BI_DC-</td>
</tr>
<tr>
<td>6</td>
<td>BI_DB-</td>
</tr>
<tr>
<td>7</td>
<td>BI_DD+</td>
</tr>
<tr>
<td>8</td>
<td>BI_DD-</td>
</tr>
</tbody>
</table>

All ports are Auto-MDIX.

**Mechanical Drawing**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.57” 65 mm</td>
<td>TS-35 DIN-Rail</td>
</tr>
<tr>
<td>3.78” 96 mm</td>
<td>(distance to DIN-rail)</td>
</tr>
<tr>
<td>0.97” 25 mm</td>
<td></td>
</tr>
<tr>
<td>0.59” 15 mm (typical)</td>
<td></td>
</tr>
</tbody>
</table>
Web Page Configuration

**WAN Setup**
- **Connection Type**: DHCP
- **Optional Settings (required by some ISPs)**:
  - Host Name:
  - Domain Name:
  - MTU: 1500

**LAN Setup**
- **Router IP**:
  - Local IP Address: 192.168.92.1
  - Subnet Mask: 255.255.255.0
- **Network Address Server Settings (DHCP)**:
  - Local DHCP Server: Enable
  - Start IP Address: 192.168.92.100
  - Number of Addresses: 10
  - Client Lease Time: 0 minutes (0 means one day)

**WAN Setup**
- **Connection Type**: Static IP
- **Optional Settings (required by some ISPs)**:
  - Host Name:
  - Domain Name:
  - MTU: 1500

**Port Forwarding**

**Router Access**
- **Local Router Access**:
  - Username:
  - Password:
  - Confirm Password:
- **Remote Router Access**:
  - Administration Port: 8080

**Firewall**
- Firewall Status:

**NAT**
- **WAN IP Address**
- **LAN IP Address**
- **Enabled**: Check box

**Onboard Help**

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**Web Page Configuration**

**Onboard Help**

**About This Page**

Use the setup page to perform basic IP settings for the WAN and LAN interfaces - such as IP address, subnet mask, etc. Connection Type is used to specify how your EIGR connects to the WAN. DHCP, Static IP, PPPoE, or PPTP.

If you select DHCP, the WAN side of the EIGR will have its IP address, subnet mask and gateway address set by a DHCP server that is directly or indirectly connected to the WAN port. If no DHCP server is available, static IP values can be entered by selecting connection type Static. IPv6 is normally used by DSL modems. PPTP (Point-to-Point Tunneling Protocol) is used by some providers for Internet Access.

The Router IP address is the IP address which you can use to configure the EIGR. This will also be the gateway address used by IP devices connected to the LAN ports of the EIGR.

The LAN Setup can be used to enable the DHCP server for the LAN side along with the starting DHCP address, the number of DHCP clients and the lease time (in minutes).

**More Information**

**Need Support?**

Our staff of engineers is available to address any issues you may be having.

Please visit our website for more information.
Power Considerations

Applied voltage must be in the specified range and deliver a current commensurate with power consumption. The recommended size for solid power conductors is 16–20 AWG; and for stranded conductors use 16–18 AWG. Zero volts (COM) is isolated from chassis (earth). Input connections are reverse-polarity protected.

Input power: 10–36 VDC or 24 VAC ± 10%, 47–60 Hz.
Connecting chassis to earth or using a backup source is always optional.

All options shown are for use in Class 2 circuits if applied voltage is limited to 30V DC.

Stateful Firewall — Promotes Secure Communication

The lower part of the router connects the LAN side (the local-area-network). The upper part connects the WAN side (wide-area-network). A firewall (which can be disabled by the user) separates the two parts.

A firewall controls the passing of messages from one side of a router to the other. A stateful firewall acts on the structure of the message and who is initiating and who is responding.

Originating requests from the LAN side and corresponding responses from the WAN side pass through the firewall. But traffic originating from the WAN side is blocked from the LAN side unless the firewall is adjusted to allow it. This protects the LAN side from unauthorised WAN access.
Data Sheet – EIGR-E Series

Specifications

**Power Requirements**  
10–36 VDC ±10% 7 W or 24 VAC ±10% 11 VA 47–63 Hz

**Operating Temperature**  
0 to 60°C (EIGR-E)  
−40 to +75°C (EIGR-EX)

**Storage Temperature**  
−40 to +85°C

**Relative Humidity**  
10–95%, non-condensing

**Protection**  
IP30

**Mounting**  
TS-35 DIN-rail

**Ethernet Communications**  
IEEE 802.3 10/100/1000 Mbps data rate  
10BASE-T, 100BASE-TX and 1000BASE-T  
100 m (max) CAT5e cable length

**LEDs**

- **PWR**: Green = Power OK  
- **STATUS**: Green = Boot up complete  
- **H**: Green = 1000 Mbps communication established  
  Yellow = 100 Mbps communication established  
  Flash = Activity  
- **L**: Yellow = 10 Mbps  
  Flash = Activity

**Regulatory Compliance**  
CE Mark; CFR 47, Part 15 Class A; RoHS;  
UL 508; C22.2 No. 142-M1987

Ordering Information

<table>
<thead>
<tr>
<th>Model</th>
<th>RoHS</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EIGR-E</td>
<td>✔</td>
<td>Skorpion GigE IP Router 0 to 60°C</td>
</tr>
<tr>
<td>EIGR-EX</td>
<td>✔</td>
<td>Skorpion GigE IP Router −40 to +75°C</td>
</tr>
</tbody>
</table>

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