The EIGR-V 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-V 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-V series includes real-time clock and OpenVPN client/server functionality. As a VPN Server, up to 15 router clients and 15 PC clients can be supported. The EIGR-V operates over 0 to 60°C temperature range and the EIGR-VX operates over −40 to +75°C range.

EIGR-V Skorpion Gigabit IP Router Features...

- Web page configuration
- 10/100/1000 Mbps WAN port
- 4-port 10/100/1000 Mbps Ethernet LAN switch
- Secure Virtual Private Network (VPN) Client/Server
- PAT, NAT, Port Forwarding and Port Range Forwarding
- Stateful Firewall and Allowlist
- Remote Router Access and NAT Loopback
- 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-V)
- Operates over −40 to +75°C (EIGR-VX)
EIGR-V — Skorpion Gigabit IP Router

Although the EIGR-V 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-V is ideal IP router for automation systems.

Quick Disconnect 4-pin Power Connector
provides connections to a DC or AC source and a connection for a backup source

35 mm Din-rail Clip
for convenient control panel installation

Writable Label
for a helpful record of connected IP devices

Connecter 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

Power LED
Power OK indicator

Reset Switch
returns the EIGR-V to its default settings

Built-in Ethernet Switch
connect up to four 10/100/1000 Mbps Ethernet devices with auto-negotiation and Auto-MDIX

Diagnostic LEDs
indicate the status of Link and Activity

10-36 VDC 7 W
24 VAC ± 10% 11 VA 47-63 Hz
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:
  - Start IP Address: 192.168.92.1
  - Subnet Mask: 255.255.255.0
  - Number of Addresses: 10
  - Client Lease Time: 0

---

**OpenVPN Connection Settings**

**Router Access**

- **Local Router Access**:
  - Username:
  - Password:
  - Confirm Password:
- **Remote Router Access**:
  - Administration Port: 3020
  - Firewall Status: Enable

**Firewall**

**NAT**

<table>
<thead>
<tr>
<th>WAN IP Address</th>
<th>LAN IP Address</th>
<th>Enabled</th>
</tr>
</thead>
<tbody>
<tr>
<td>129</td>
<td>250</td>
<td>TO</td>
</tr>
<tr>
<td>35</td>
<td>21</td>
<td>TO</td>
</tr>
<tr>
<td>192</td>
<td>168</td>
<td>TO</td>
</tr>
<tr>
<td>119</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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.
## 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-V)
−40 to +75°C (EIGR-VX)

**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**

<table>
<thead>
<tr>
<th>LED</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PWR</td>
<td>Green = Power OK</td>
</tr>
<tr>
<td>STATUS</td>
<td>Green = Boot up complete</td>
</tr>
<tr>
<td>H</td>
<td>Green = 1000 Mbps communication established</td>
</tr>
<tr>
<td></td>
<td>Yellow = 100 Mbps communication established</td>
</tr>
<tr>
<td>L</td>
<td>Yellow = 10 Mbps</td>
</tr>
<tr>
<td></td>
<td>Flash = Activity</td>
</tr>
</tbody>
</table>

**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-V</td>
<td>✓</td>
<td>Skorpion GigE IP Router with VPN 0 to 60°C</td>
</tr>
<tr>
<td>EIGR-VX</td>
<td>✓</td>
<td>Skorpion GigE IP Router with VPN −40 to +75°C</td>
</tr>
</tbody>
</table>

---

**United States**
Contemporary Control Systems, Inc.
2431 Curtiss Street
Downers Grove, IL 60515
USA

Tel: +1 630 963 7070
Fax: +1 630 963 0109
info@ccontrols.com

**China**
Contemporary Controls (Suzhou) Co. Ltd
19F, Metropolitan Towers, No.199 Shishan Road,
Suzhou New District, 215009 China

Tel: +86 512 68095866
Fax: +86 512 68093760
info@ccontrols.com.cn

**United Kingdom**
Contemporary Controls Ltd
14 Bow Court
Fletchworth Gate
Coventry CV5 6SP
United Kingdom

Tel: +44 (0)24 7641 3786
Fax: +44 (0)24 7641 3923
info@ccontrols.co.uk

**Germany**
Contemporary Controls GmbH
Fuggerstraße 1 B
04158 Leipzig
Germany

Tel: +49 341 520359 0
Fax: +49 341 520359 16
info@ccontrols.de

**www.ccontrols.com**