# Spectre RT Industrial Routers

## ERT31x Series

## PRODUCT FEATURES

- VPN security
- Firewall support
- NAT/PAT address & port translation
- SNMP management
- Wide temperature range -40 to 75°C
- Complies with NEMA TS1 & TS2

The Spectre RT industrial router connects Ethernet equipment in tough environments where office-grade equipment can't handle the job.  With Ethernet, USB, I/O and auxiliary ports it's a flexible device with the built-in ability to handle multiple data communications protocols and to fit into virtually any network topology.

The Spectre RT supports the creation of VPN tunnels using IPsec, OpenVPN and L2TP. It supports DHCP, NAT, NAT-T, DynDNS, NTP, VRRP, control by SMS, and numerous other functions, as well as additional software.  A password-protected Web interface allows users to configure and manage the Spectre RT from remote locations.  The router can automatically upgrade its configuration and firmware from the operator's central server, allowing for simultaneous mass reconfiguration of every router on the network.

Users may insert Linux scripts and they can create up to four different configurations for the same router.  Examples would include binary input configurations.  Users may switch from one configuration to another at any time.

## ORDERING INFORMATION

| MODEL NUMBER | DESCRIPTION |
| --- | --- |
| ERT310 | 1 WAN, 1 LAN |
| ERT312 | 1 WAN, 1 LAN (RS-232) |

## ACCESSORIES

**C5UMB7FBG** - Category 5e, 7 ft. (2.1 M), Grey

**MDR-20-24** - DIN rail mount power supply 24VDC, 1.0 A output power

**MDR-40-24** - DIN rail mount power supply 24VDC, 1.7 A output power

## SPECIFICATIONS

| INTERFACES | |
|---|---|
| Standard | |
| Ethernet | 10/100 Mb |
| USB | USB Type A Host |
| Binary I/O | 1 input/1 output |
| Port Options | |
| Port 1 | Ethernet 10/100, RS-232, RS-422/485, Modbus, CNT (I/O) |
| Port 2 | RS-232, RS-422/485, Modbus, CNT (I/O) |
| I/O CNT | 4 Binary inputs, 1 Binary output (2 inputs maybe configured as counters) 2 Analog inputs, I Binary output |

| INTERNAL |
|---|
| 32b ARM microprocessor |
| 512 Mb DDR SDRAM |
| 128 Mb Flash |
| 1 Mb MRAM |

| POWER | |
|---|---|
| Source | 10 – 30 VDC |
| Consumption | Max. 200 mA (12 VDC) |

| MECHANICAL | |
|---|---|
| Dimensions | 11.4 x 9.5 x 4.2 cm (4.49 x 3.74 x 1.65 in) |
| Enclosure | Metal |
| Weight | 150 g |

| ENVIRONMENTAL | |
|---|---|
| Operating Temperature | -40 to 75°C |
| Storage Temperature | -40 to 85°C |

| FEATURES | |
|---|---|
| Networking | DHCP – automatic IP addressing in LAN network |
| | NAT – IP address and ports translation between inside/outside network |
| | Firewall: filtering of addresses, ports, protocols |
| | VRRP – virtual backup router function |
| | DynDNS client – access to the router with a dynamic IP address |
| | VLAN 802.11Q: virtual LAN |
| | QoS: quality of service |
| | Dial-in – Communicate via CSD call |
| | NTP client, NTP Server: time synchronization |
| | PPPoE Bridge – PPP frames encapsulation inside ETH frames |
| VPN Tunneling | IPsec, OpenVPN, L2TP – secure encrypted tunnels |
| | GRE tunnel – simple tunnel without security measures |
| Configuration and Diagnostics | HTTP server – configuration via web server |
| | Telnet – configuration and access to the file system |
| | SNMP – router diagnostics, communication with I/O and M-BUS |
| | Remote router group configuration change, switching among configuration profiles |
| | SSH – encrypted configuration and access to the file system |
| Additional Functions | Linux based: program your own applications |
| | AT commands on RS232, Ethernet and I/O |
| | M-RAM memory inside – router statistic saved into memory |

| APPROVALS / CERTIFICATIONS |
|---|
| CE, FCC, NEMA TS2 |
| EN 301 511, v9.0.2 |
| EN 301 908-1&2, v3.2.1 |
| ETSI EN 301 489-1 V1.8.1 |
| EN 60950-1:06 ed.2 + A11:09 + A1:10 |
| IEC60068-2-27, Shock   50G peak, 11ms, 3 axes |
| IEC60068-2-6, Vibration   10-500Hz, 4G, 3 axes |

## MECHANICAL DIAGRAM