



FEATURE HIGHLIGHTS

Powerful & Trusted Platform

- Quad-Core High-Performance Platform
- Secure VPN and Firewall Isolation
- 5x 1000 Base-TX RJ-45, 1x WAN, 4x LAN
- IEC 62443-4-2 Cybersecurity Compliance*

Compact and Robust

- Dimensions (mm): 145 x 120 x 46
- Industrial EMC
- -40°C to +75°C Temp. Operation
- CE/FCC and Other Certifications

Quick Deployment & Management

- Various Remote Management Protocols

Reliable & Redundant Design

- Power Redundancy with PoE PD and DC
- Multi-WAN Failover

* Coming soon

PRODUCT DESCRIPTION

ATOP ER, or Ethernet Router, is an advanced device that allows a very tangible scale-up of almost any industrial infrastructure. In addition to high EMC protection, wide-temperature operation, superb hardware and advanced features, ER will provide high-speed internet access with load balancing and high degrees of security, high speeds and advanced configuration options.



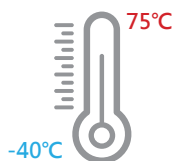
Quad-ARM Cortex A7 CPU

ER integrates an industrial-grade Quad-core A7 ARM CPU, enabling the processing power you need to filter heavy traffic over firewalls, routing, forwarding and security measures.



High-Performance

With its integrated 4 x RJ45 LAN ports and 1 x RJ45 WAN Port with VPN feature, ER provides high-throughput connections.



Harsh Environments

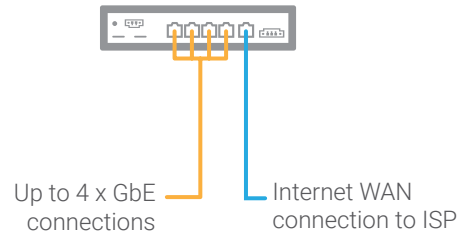
ATOP ER is proven to run at its maximum loading in the harshest EMC and climate environments.



Security

Integrating firewall, zone forwarding, and VPN features, ATOP ER allows you to connect your industrial network to the internet without fearing intrusions into your organization data.

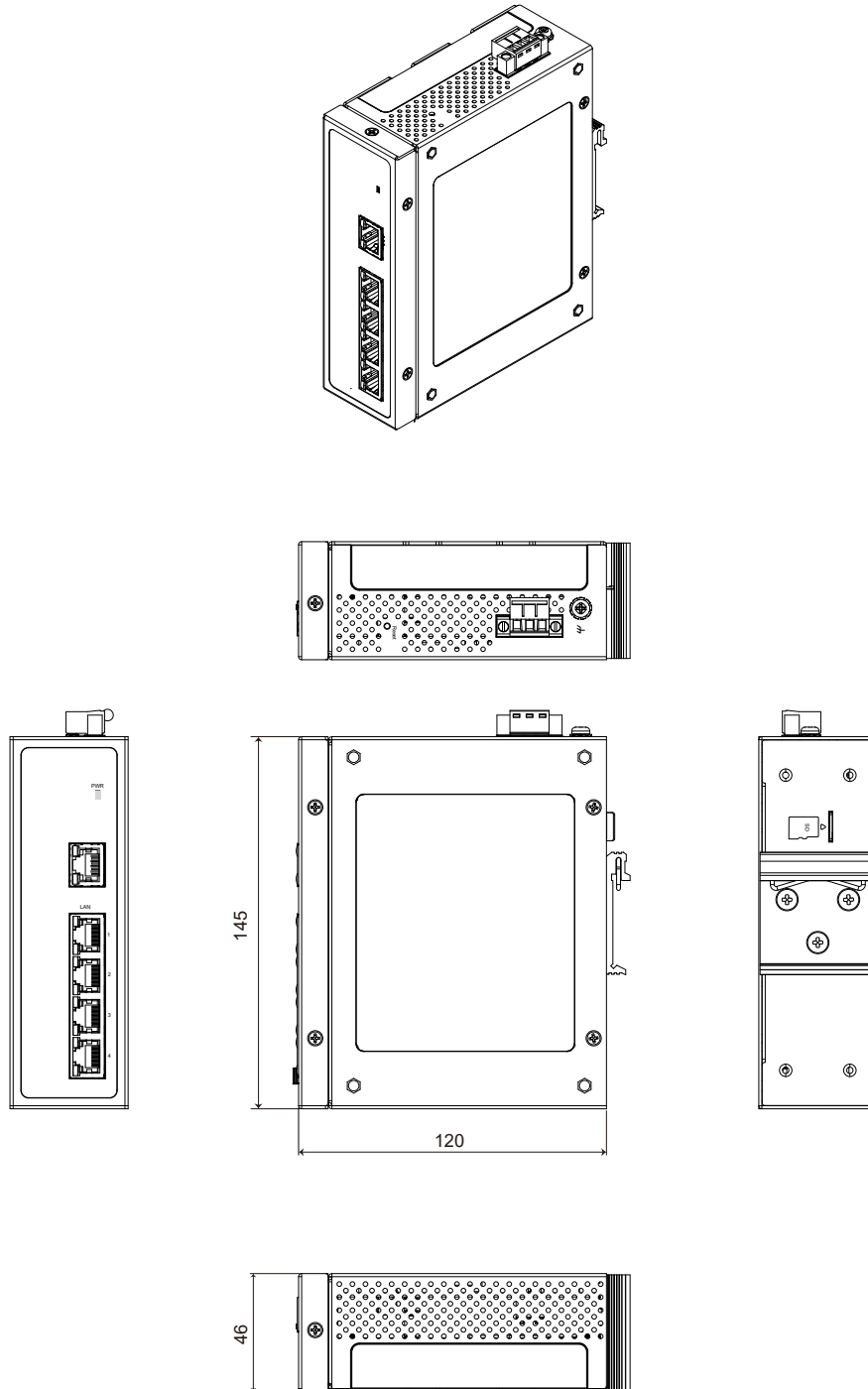
APPLICATION



As a Ethernet Router

ER5805 allows you to easily set up a VPN Router environment for providing a secured access to all users. Perfect for VPN deployment where high speed is required, ER can bridge to the remote VPN server via various VPN protocols with secured key exchange algorithms. Finally, these features are all enclosed in a rugged fanless design with operation temperatures from -40°C up to +75°C, to suit applications in any environment.

DIMENSIONS & LAYOUT



ER5805 SERIES: 145 x 120 x 46 mm

SPECIFICATIONS

| Hardware Specifications | | |
|---------------------------------|--|--|
| Model Name | ER5805 | |
| SOC | | |
| CPU | ARM Cortex A7, Quad-Core | |
| Network Interfaces/Connectivity | | |
| Ethernet ports | Standard | IEEE 802.3 for 10BaseT IEEE 802.3u for 100BaseT(X) IEEE 802.3ab for 1000BaseT(X) |
| | Ports | 5x 10/100/1000 BASE-TX RJ-45 1 x WAN 4 x LAN |
| Watchdog | | |
| Hardware WD Reset | Yes | |
| External IO Interfaces | | |
| Default/Reset Button | 1 key | |
| SD Slot | 1x micro-SD slot | |
| Power | | |
| Rated Supply Voltage | DC Power : 12-48V | |
| Input Voltage Range | DC Power : 10.8-52.8V | |
| Consumption | < 20W | |
| Redundancy | Yes, PoE Model, Option for PoE or DC Input | |
| Connector | 3-pin Terminal block | |
| Reverse polarity protection | Yes | |
| PoE (PoE version only) | PoE PD, 802.3at, Mode A, @LAN4 | |
| Mechanicals | | |
| Casing material | Metal housing | |
| Dimension L x W x H (mm) | 145 x 120 x 46 | |
| Weight (g) | 726 | |
| Installation | DIN-Rail or Wall-Mount (optional kit) | |
| Ingress Protection Rating | IP30 protection | |
| Environment limits | | |
| Operating Temperature | -40°C to +75°C (-22°F to +158°F) | |
| Storage Temperature | -40°C to +85°C (-40°F to +185°F) | |
| Ambient Relative Humidity | 5% to 95% RH, (non-condensing) | |

| Software Specifications | |
|-----------------------------|--|
| Internet Connection | |
| Authentication | CHAP/PAP/Auto |
| Network | |
| IPv4/IPv6 | DHCP server |
| | DHCP Client/Static IP/PPPoE |
| Connection Protocol/Service | Telnet, SSH, SCP, Http, Https, SNMP |
| Industrial Protocol | NTP, DNS, 802.1Q VLAN, QoS, VRRP, MQTT |
| Security | |
| Firewall | Access control list (ACL) |
| | Port Forwarding |
| | Attack Prevention (Inserted after Port forwarding) |
| VPN | IPSEC, OPEN-VPN, LT2P, PPTP Server, GRE |
| Management | |
| System Configuration | WEB, Telnet, SSH |
| Firmware upgrade | WEB |
| System Log | SD Storage, remote logger, local flash |
| SNMP | SNMP v1/v2/v3 |
| Diagnostics | Ping, Traceroute, Nslookup |
| Statistics | |
| Statistics | Memory, WAN, LAN |

REGULATORY APPROVALS

| Regulatory Approvals | | | | | |
|----------------------|---|-------------------|----------------------------|----------------------------|---|
| Safety | IEC/EN62368-1 | | | | |
| EMC | FCC Part 15, Subpart B, Class A EN 55032, EN 55035, EN 61000-3-2, EN 61000-3-3 | | | | |
| Test | Item | | Value | Level | |
| IEC 61000-4-2 | ESD | Contact Discharge | ±6KV | 3 | |
| | | Air Discharge | ±8KV | 3 | |
| IEC 61000-4-3 | RS | Enclosure Port | 3 (V/m) , 80-1000MHz | 3 | |
| | | | 3 (V/m), 1-6GHz | 2 | |
| IEC 61000-4-4 | EFT | DC Power Port | ±2.0KV@ 5.0kHz | 3 | |
| | | Signal Port | ±1.0KV @ 5.0kHz | 3 | |
| IEC 61000-4-5 | Surge | DC Power Port | Line-to-Line ±1KV | 3 | |
| | | | Signal Port | Line-to-Earth ±2KV | 3 |
| | | | Line-to-Earth ±2.0KV | 3 | |
| IEC 61000-4-6 | CS | DC Power Port | 3V, 150KHz to 80MHz, 80%AM | 2 | |
| | | | Signal Port | 3V, 150KHz to 80MHz, 80%AM | 2 |
| IEC 61000-4-8 | PFMF | Enclosure | 1A/m (r.m.s), 50Hz or 60Hz | 1 | |
| Shock | IEC 60068-2-27 | | | | |
| Drop/Freefall | IEC 60068-2-32 | | | | |
| Vibration | IEC 60068-2-64 | | | | |
| Others | RoHS, including 2015 amendment REACH Conflict-Mineral Free | | | | |
| Warranty | 5 years | | | | |

ORDERING INFORMATION

Ordering information

| Model | Part Number | Ethernet (RJ45) | PoE |
|---------|-----------------|-----------------|-----|
| ER5805 | 1P1ER580500001G | 1x WAN, 4x LAN | - |
| ER5805P | 1P1ER5805P0001G | 1x WAN, 4x LAN | Yes |

Optional Accessories

| Model | Part Number | Description |
|-------------|-----------------|---|
| AD1048-24FS | 50500481240001G | DIN-Rail Power Supply Input: 100-240VAC / 120-370VDC; Output: 2A@24VDC |
| UV336-1230 | 50500361120001G | Power adapter Input: 100-240VAC; Output: 3A@12VDC; US plug |