ESP - Electronic Security Perimeter Appliance

FEATURES

- Provides NERC CIP security perimeter
- Industrial temperature rated -20 to +70 C
- 1 Asynchronous RS232 9-pin DTE port
- 2 Expansion serial USB ports
- 3 - 10/100/1000 Ethernet ports
- Remote Syslog activity logging
- Radius Server Authentication
- User name and password authentication
- SSH to serial
- SSH to Telnet
- Transparent firewall
- Easy to setup and maintain
- Web https configuration
- Statistics logging and diagnostic tools
- Compact size, Stand-alone, DIN rail clip option
- AC and DC power supply options

DESCRIPTION

The ESP is an industrial rated electronic security perimeter add-in device used as a front end for legacy devices requiring modern security features. The ESP is used to protect against electronic security intrusions, to meet NERC-CIP requirements, to meet new corporate security standards, etc.

The ESP is the solution when...
- users must be authenticated centrally
- system activity must be documented
- user access must be added, changed and revoked quickly
- legacy devices require modern security features.

The ESP has one built in 9-pin serial DTE serial port and 2 USB ports for connection to up to 3 serial devices that require modern security features such as more complex passwords, Radius and/or Syslog.

The ESP has three 10/100/1000 MDI/MDIX Ethernet ports, one for network connection, 2 to connect to the Ethernet ports of devices requiring restricted access, Radius and/or Syslog.

There are several high security modes on this versatile device.
- Radius for serial connections
- Add password challenge when none is currently available on a legacy device
- Syslog reporting
- SSH to serial access (serial server)
- Ethernet to Ethernet radius and/or syslog
- Transparent firewall

The ESP logs all access attempts, access statistics, and management functions.

The ESP is configured using the serial port to set the initial IP address, and an HTTPS web interface for more detailed configuration. An administrator must be authenticated to perform any remote management.

The ESP security device is ideally suited for Critical Infrastructure Protection regulations propagated by the NERC and some FIPS standards. It may be used to meet NERC Cyber Security Standards CIP-005-2 and CIP-005-1 to secure the electronic security perimeter (CPS) around critical cyber assets.
SPECIFICATIONS

General
Up to three asynchronous serial ports:
- One DE-9P DTE (PC-9pin) connector
- Two USB serial DTE or DCE ports
- Speeds to 115.2 Kbps

Three 10/100/1000 Ethernet ports. “ETH3” is the typically used as the upstream Network port. “ETH1” and “ETH2” are used to connect to the protected device ports.

Unused ports can be disabled

Security Modes:
- Password policy enforcement
- Syslog support
- Radius support
- Transparent Firewall

Transparent Firewall Capabilities:
- Limit access through device
- Logging of events
- ARP rules
- IPv4 Rules
- Low level Ethernet rules
- Optional logging of firewall events

Connection Modes:
- Serial to Serial “lump-in-the-cable”
- Ethernet to Ethernet “lump-in-the-cable”
- User authentication challenge via Radius
- Local user authentication
- HTTPS Web management
- SSH to serial
- SSH to telnet

Indicators (front panel)
Power, Status, serial port activity, LAN activity

Physical/Electrical
Dual core
Gigabit X86 processor
Near wirespeed (gigabit) Ethernet
Standalone or DIN mounting
Power requirements: 12 VDC, 6 to 12 watts
48 and 125 VDC options are available
Supplied with 100-240 VAC external power supply
4 ¼”x 5 ½”x 1 ¾”
One pound

Environmental
- Operational Temperature: -20 to +70 C
- Storage Temperature: -50 to +75 C
- Humidity: <95% Non-condensing