NPServe, a secure communications module, is designed specifically for underground vault applications

The NPServe™ communications module is designed for harsh underground vault applications and is a specialized communication concentrator with high-speed processing built specifically for secure and reliable data analysis and control. It requires no software and is a key component for smart underground applications. Eaton's NPServe module has been designed to operate over a broad temperature range, which is critical to underground environments.

The NPServe module was designed with the horsepower to leverage intelligent solutions and algorithms needed for todays Smart Grid roadmaps and will handle the most stringent security demands.

The module is the key component to gather and distribute communications from IED and sensors deployed in the underground space.

- Extracts and concentrates data from sensors and IEDs
- Provides secure remote access
- Controls third-party devices
- Multiple I/O channels available for collection of sensors
- Seamlessly integrates with the VaultGard™ communication system
- Built-in web page views specifically designed for analysis and application

- Easy access with smart devices
- Exports to SCADA, control centers, and any other management applications

Security

- Access Control: Configuration user privilege levels
- Sessions: Timed login/logout
- Encryption: IPSec Support, HTTPS
- Central Authentication and Authorization: LDAP/S, ActiveDirectory and RADIUS
- DNP: Secure Authentication
- Accounting: RADIUS

Flexibility

- Ideal for retrofit and upgrade projects. It integrates existing / legacy RTUs, IEDs, PLCs, and multiple control centers
- Suitable for distribution automation applications
- (2) RS-485 DNP Ports

- Data filtering allows for efficient bandwidth management over legacy low-speed networks
- Supports programming through:
  - USB port
  - Built-in programming pages via network architecture using Ethernet port
- Fully compatible with VaultGard family of products, including VaultGard VISON system for gateway networking and map overlays
- Has native INCOM inputs for:
  - Network Protector MPCV compatibility
  - Compatibility with the entire family of legacy Eaton relays and devices that speak INCOM
- (3) Output control relays to control any device
- (6) Analog input channels (+/- 5 Volts) for smart sensors
- (8) Digital Inputs for any device with a contact monitoring output (such as float sensors, sump pump alarms, door alarms, sensor alarms, etc)

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Reliability

- Built specifically for underground harsh environments
- Built In DNP Profile Builder
- Includes user-friendly configuration tools for simplified commissioning

Robustness

- Eaton is the industry leader in underground vault communications and automation
- Firmware can be tailored and customized to suit

General Features

Data concentration

Protocol translation

Built-in web server

Passthrough connections

Real-time clock

Power supply monitoring

Protocols

DNP3.0,

INCOM™

DNP UDP/IP uplinks

MPCV RS232 (MPCV Pendant)

USB 2.0

Processor

Texas Instruments
AM3352ZCZ80, 750MHz

Security Features

Built-in firewall

Firmware update process blocks malware

Remote access management

User account management

Strong passwords

User account and user groups

Detailed group permission

Security event logging and monitoring

Account lockout

Retrievable access logs for auditing

All system components digitally signed

Continuous file monitoring for system integrity

DNP3 secure authentication V2 and V5

Communications

Serial:
1 RS-232
2 RS-485
1 USB 2.0

Ethernet:
1 10/100BASE-TX

Others:
INCOM™

Standards Compliance

Protective Relay Standards[1]
  IEEE C37.90 2005
  IEC 60255

[1] With some exceptions

EMI Immunity Type Tests and Specifications
  IEC-61850-3
  IEEE-1613

Telephone Terminal Equipment
  TIA-968-A
  CS-03

Unit test list available upon request

Connectivity

Utilizes DNP stack including Secure DNP Authentication

USB port for interface to perform maintenance and configuration options

For additional product information,
call **1-877-277-4636** or
visit: **www.eaton.com**

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