

## Applications

The VeriSafe Network Module provides a way to leverage data from an Absence of Voltage Tester (AVT) for smarter system monitoring. Take troubleshooting to the next level by automatically measuring voltage and monitoring AVT results, without the need to open equipment doors and covers.

*VS2-NET is ONLY compatible with VS2-AVT models*

## Key Features and Benefits

### Smart Technology

- Keep doors and covers closed for monitoring and troubleshooting
- View AVT test results and data logs
- Use voltage and test data to trigger alerts in your control system

### Flexible Integration

- Ethernet connectivity
- Solid state I/O contacts
- Custom Add on Profile for easy integration in Rockwell Automation Studio 5000, Automatic Diagnostics ready

## Onboard Web Application

The screenshot shows the VeriSafe 2.0 web application interface. On the left is a navigation menu with options: Data Logs, Settings, Documentation, Support, and Logout. The main content area is divided into several sections:

- 2** Name: VeriSafe 2.0 (with a green checkmark icon)
- 3** Updated: 8/31/21, 2:25 PM. Battery Voltage: 3.2 V. AVT Temperature: 20° C (68°F)
- 4** Updated: 8/31/21, 2:26 PM. Connection Status L1: YES, L2: YES, L3: YES, GND: YES
- 5** Test Result 1: Pass (8/31/21, 2:28 PM). Test Result 2: Connectivity Not Confirmed (2/6/00, 10:07 AM)
- 6** Voltage Presence: L1, L2, L3 (all showing red lightning bolt icons)
- 7** Voltage Measurements:
 

Line To Ground	RMS	Peak
L1	480 Vrms	687 V
L2	479 Vrms	677 V
L3	480 Vrms	679 V

Line To Ground	RMS	Peak
L1-L2	277 Vrms	392 V
L1-L3	277 Vrms	392 V

- 1** Access to historical data and test results
- 2** Customizable name for easy identification and device management
- 3** Monitor and trend temperature (AVT Isolation Module)
- 4** Verify AVT sensor lead status

- 5** AVT test results with diagnostic codes & timestamp
- 6** Quickly identify voltage loss in any phase
- 7** Voltage Measurement
  - Troubleshoot remotely
  - Views for three-phase and single-phase (AC or DC)

## Technical Specifications

### ENVIRONMENT

Operating Temperature	-25°C to 60°C (-13°F to +140°F)
Storage Temperature	-45°C to 85°C (-49°F to +185°F)
Humidity	5 to 90% non-condensing; Rated 80% at 40°C, decreasing linearly to 50% at 60°C
Pollution Degree	3
Degree of Protection	IP20
Altitude	Up to 5,000 meters (3.1 miles)
Dimensions	5.3 in x 4.4 in x 1.1 in (135 mm x 112 mm x 28 mm)

### POWER\*

Power over Ethernet	PoE (10/100) IEEE 802.3at (-af) Type 1 Class III PoE topology
DC Input	12-24 VDC 24-14 AWG (0.75 - 1.5 mm <sup>2</sup> ) Solid/Stranded
Current Draw	84mA @ 12 VDC @ 42mA 24 VDC
Power Consumption	1 Watt

\*Note: Network Module supplies power to the AVT. No additional AVT power (battery or DC) required.

### NETWORK

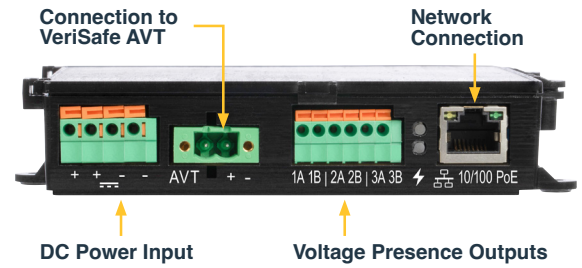
Communication Protocols	EtherNet/IP
Connector	Standard RJ45
Data Refresh Rate	2 seconds; upon test initiation
Onboard Web Application	

### SECURITY

Features	Secure boot, flash encryption, HTTPS support
Isolation	Network module communication is isolated from the AVT safety function

### VOLTAGE PRESENCE CONTACTS

Solid-state Relay	Normally open, relays close when red AVT indicators are illuminated (>47 V)
Wire Size	26-16 AWG (0.13 - 1.3 mm <sup>2</sup> ) Solid/Stranded
Isolation	5000 Vrms Input/Output
Voltage Rating	30 VDC and 30 VAC
Current Rating	80 mA (max)
On-resistance	30 Ω



### INSTALLATION

Attach to AVT Isolation Module (shown) or mount separately (DIN Rail or surface)



### CERTIFICATIONS

- UL 508A Industrial control panel component
- UL 1604 ITE equipment for hazardous locations



Note: Refer to the VS2-NET User Manual for full list of standards and certifications.

### VOLTAGE MONITORING RESOLUTION

Range - VAC Accuracy	Range - VDC Accuracy
40*-200 VAC +/- 4 V	40*-300 VDC +/- 9 V
201-300 VAC +/- 2 %	301-700 VDC +/- 2%
301-1000 VAC +/- 1.5%	701-1000 VDC +/- 1.5%

\*The Network module is designed to report measured values between 40-1000 V. The Network module is not optimized to report voltages under 40 V. However, the absence of voltage indication from the AVT utilizes a separate circuit that is highly accurate and optimized for the 3V threshold.