VeriSafe™ 1kV Network Module

PANDUIT®
PRODUCT BULLETIN

The VeriSafe 1kV 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.

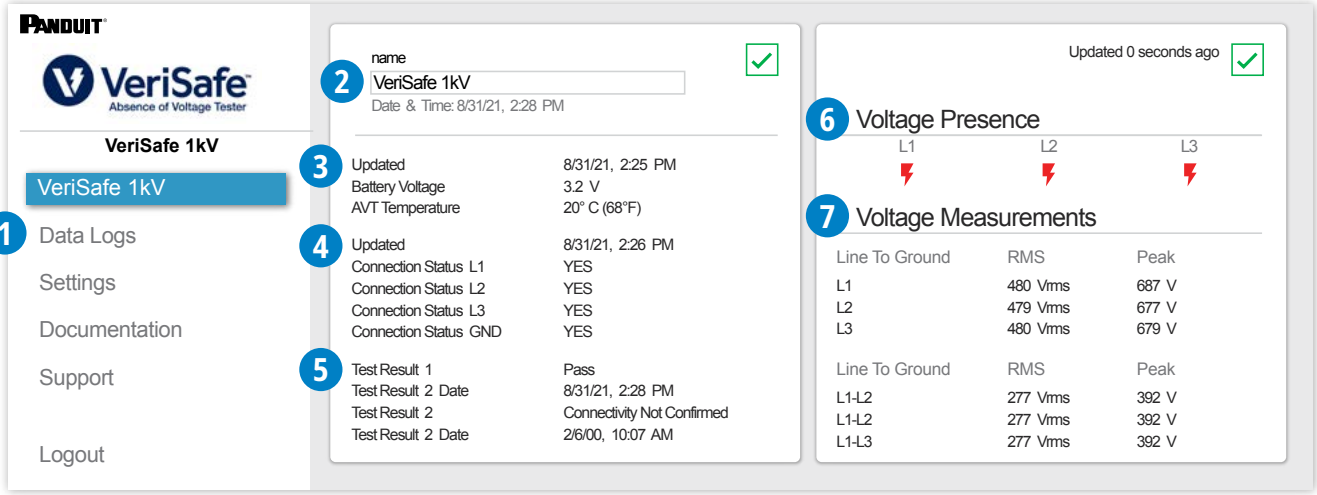
VeriSafe 1kV Network Module is ONLY compatible with VeriSafe 1kV AVTs

VeriSafe™
Absence of Voltage Tester

KEY FEATURES & 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



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. **Verify AVT sensor lead status**

TECHNICAL INFORMATION

ENVIRONMENT	
Temperature:	Operating: -13°F to +140°F (-25°C to 60°C) Storage: -49°F to +185°F (-45°C to 85°C)
Humidity:	5 to 90% non-condensing; Rated 80% at 104°F (40°C), decreasing linearly to 50% at 140°F (60°C)
Pollution degree:	3
Degree of protection:	IP20
Altitude:	Up to 16,400 feet (5,000 meters)
Dimensions:	5.3 in. x 4.4 in. x 1.1 in. (135mm x 112mm x 28mm)
POWER*	
Power over Ethernet:	PoE (10/100) IEEE 802.at (-af) Type 1 Class III PoE topology
DC input:	12-24 VDC 24-14 AWG (0.75mm – 1.5mm^2) Solid/Stranded
Current draw:	84mA @ 12 VDC @ 42mA 24 VDC
Power consumption:	1 Watt
NETWORK	
Communication protocols:	EtherNet/IP Modbus
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 (0.13mm – 1.3mm^2) Solid/Stranded
Isolation:	5000 Vrms Input/Output
Voltage rating:	30 VDC and 30 VAC
Current rating:	80 mA (max)
On-resistance:	30 Ω

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

VeriSafe™ 1kV Network Module

STANDARDS AND CERTIFICATIONS

LISTED E489576 LISTED E495719

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

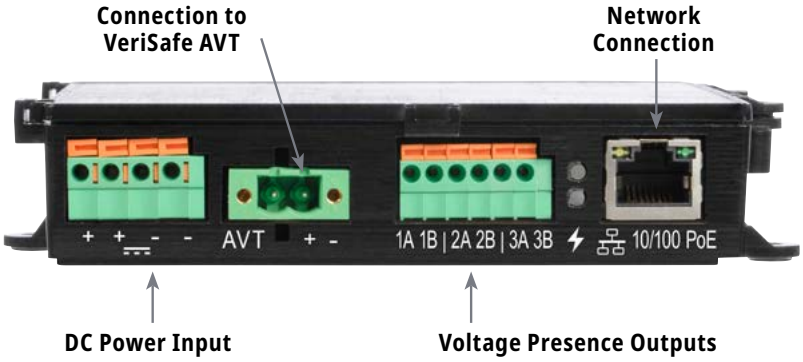
Note: Refer to the VS2-NET User Manual for full list of standards and certifications.

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.

CONNECTIONS



INSTALLATION

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