



elseta

Voltage Sensor Amplifier

multi IOMOD Meter with single voltage sensor



The Voltage Sensor Amplifier is designed to allow a single voltage sensor (per phase) to interface with multiple IOMOD Meter and IOMOD FPI devices, eliminating the need for amplitude and phase correction.

Enhance your engineering applications with our advanced three-channel Voltage Sensor Amplifier. Engineered for high precision, it provides a stable impedance load to maintain the accuracy of voltage sensors. With a gain factor of 1, it ensures signal fidelity without distortion. Facilitate the simultaneous connection of multiple metering devices to a single voltage sensor, eliminating the need for complex amplitude factor calculations and tuning. Optimize your measurements with this robust and technically sophisticated solution.

This device is engineered for applications such as sub-metering, machine monitoring, calibration checks at consumer locations, power measurement, data logging, and power quality analysis. It's compatible with FTU, DTU, Bay Controllers, Multifunction Protection Relays, Merging Units, and RTU applications.

Applications

- Power Grid
- Solar energy projects
- Wind energy projects
- Hydro energy projects
- Smart RMU applications
- Factory resources supervision
- Energy sub-metering applications
- Substation automatin projects



Technical
documentation



Ordering

Features

- Very simple installation
- Not affect amplitude and phase correction
- Isolated power circuit
- Wide operating range



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Input	
Input	3×3.25 V/√3 AC (IEC 61869-11)
Voltage input range	0..10V AC
Voltage input impedance	1 MΩ; < 170 pF
Frequency measurement range	45..65 Hz
Overvoltage protection	±20V
Output	
Output	3×
Voltage output range	3.25 V/√3 AC (IEC 61869-11)
Power supply	
Auxiliary power supply	9-33VDC (full range)
Overvoltage protection	35VDC (+/-5%)
Reverse polarity protection	Yes
Isolation	Power supply circuit isolated
Power consumption	<200mA @12 VDC
Operating conditions	
Operating temperature	-25°C ... 55°C
Storage temperature	-40°C ... 85°C
Humidity	max. 95 % (non condensing)
Protection class	IP20
Dimensions and installation instructions	
Case height x width x depth	119 x 17.5 x 101 mm
Installation type	DIN Rail mounting

Order Codes	
<u>VSA v1</u>	Voltage Sensor Amplifier v1 (with input/output screw terminals)
VSA v1-RJ	Voltage Sensor Amplifier v1 (with input/output RJ45 connectors)