VS60

Voltage sensor 0-60VDC

USER MANUAL

Technical Features

- Sensor for measuring voltages in the range 0–60 VDC
- 2.75kV galvanically isolation between voltage input and 1-Wire data bus
- 1-Wire bus (2x RJ11 for daisy-chaining)
- 16 bit resolution ADC
- Accuracy ± 0.1%
- Power supply: 4.5V to 5V (1-Wire bus)
- Operating conditions: -20 to +70°C / 5 to 85% RH(non-condensing)
- Mechanical dimensions 90 x 65 x 35 mm (2 modules wide)
- Weight: 65 g
- Mounting on 35 mm DIN top-hat rail

Applications and usage

- Signal converter for 0-10V industrial sensors
- 12V, 24V, 36V or 48V battery voltage sensor
- Measuring pH, CO2 or gas pressure and concentration levels using special probes
- Measuring fuel level(gasoline or diesel) in a tank
- Measuring pressure
- The output readings from VS60 can be processed in Ethernet controller IPS3000.
  Data in VDC can be converted to other units using multiplier and offset.

Installation Instructions

The sensor has 4-wires which are connected to a compatible IP Sensors controller.

1	**GND(Green/White)**
2	**1 wire Data(Green)**
3	**GND(Brown/White)**
4	**+5V(Brown)**

All IPsensors controllers can support "1-Wire" sensors. On every sensor on the bus is assigned a unique serial number which is used to address the sensor during communication. Multiple sensors can be connected in two ways: directly connected (star topology) or "daisy chained" (linear topology). Many factors can determine the maximum length of the cable, including the sensor network topology, the number of sensors and ambient electromagnetic noise. Combined cable lengths to all sensors of 50 m using Cat 5e cable have been successful. However, due to the uniqueness of installation environments, results may vary. We recommend to do test in the desired environment before making a permanent installation. Cable capacitance generally limits the length. A linear (daisy chain) topology will minimize signal reflections, providing a more reliable connection and will allow longer cable length than a star topology. The 1-Wire bus is "single-ended" and has no intrinsic noise protection. If the cable is routed near power lines is susceptible to interference from fluorescent fixtures, motors or other noise sources. Keep the cable wiring short and avoid routing it near other electrical equipment.