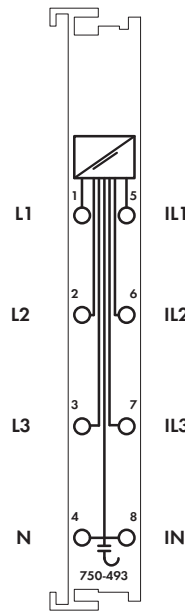
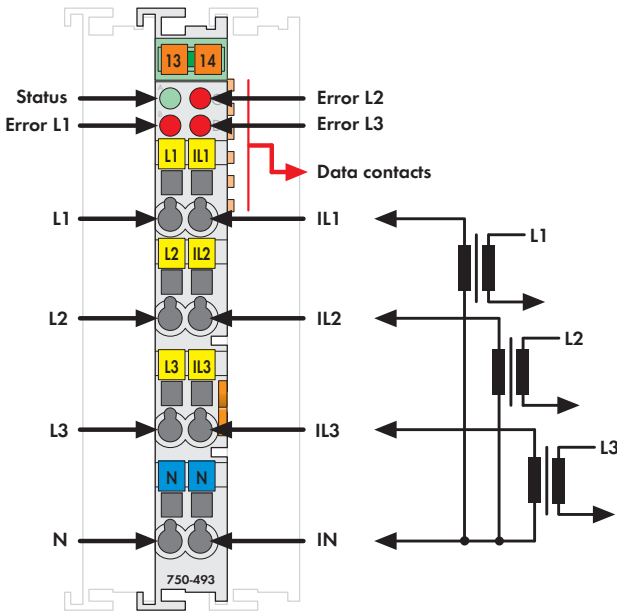


3-Phase Power Measurement Module




Delivered without miniature WSB markers

The 3-phase power measurement module measures the electrical data in a three-phase supply network. The voltage is measured via network connection to L1, L2, L3 and N. The current of the three phases is fed to IL1, IL2, IL3 and IN via current transformers.

The 3-phase power measurement module transmits the root mean square values into the process image without requiring high computing power from the controller. For each phase, the effective power (P) and the energy consumption (W) are calculated by the 3-phase power measurement module using the root mean square values for all measured voltages (V) and currents (I). For example, both the apparent power (S) and phase shift angle (ϕ) can be easily derived from these values.

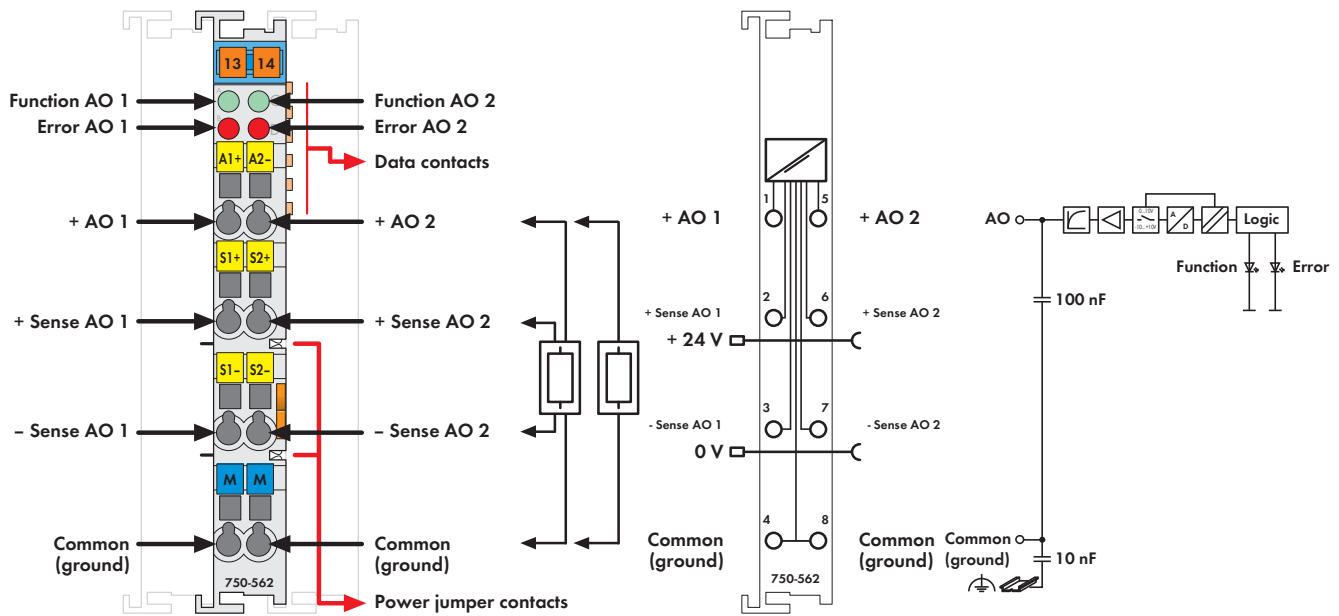
Therefore, the 3-phase power measurement module provides comprehensive network analysis via fieldbus. By means of values such as voltage, current, effective and apparent power consumption or load condition, the operator is able to optimally regulate the supply to a drive or machine and protect the installation from damage and failure.

| Description | Item No. | Pack. Unit |
|---|-----------------------|------------|
| 3-Phase Power Measurement Module (1 A) | 750-493 | 1 |
| 3-Phase Power Measurement Module (5 A) | 750-493/000-001 | 1 |
| Accessories | | |
| Miniature WSB Quick marking system | | |
|  plain | 248-501 | 5 |
| with marking | see pages 352 ... 353 | |
| Approvals Also see "Approvals Overview" in Section 1 | | |
| Conformity marking | CE | |
| UL 508 | | |

| Technical Data | |
|--|--|
| Number of inputs | 6 (3 voltage inputs, 3 current inputs) |
| Measuring voltage (max.) | 500 VAC 3~ |
| Input resistance voltage path (typ.) | 500 kΩ |
| Measuring current (max.) | 1 A (750-493) 5 A (750-493/000-001) |
| Input resistance current path (typ.) | 33 mΩ (750-493) 6.8 mΩ (750-493/000-001) |
| Resolution | 16 bits |
| Frequency range with activated DC filter | 10 - 500Hz |
| Frequency range with deactivated DC | 0 - 500Hz |
| Max. operating frequency | approx. 2 kHz |
| Signal form | any (in consideration of the frequency range and max. operating frequency) |
| Measuring error for current and voltage | 0.5 % (of the upper range value) |
| Measuring procedure | True RMS with 64,000 samples/s |
| Measuring cycle time | configurable, preset at 50 ms per measured value |
| Measured values | Effective power, energy, power factor (cos ϕ) |
| Power supply | via system voltage internal bus (5 V) |
| Current consumption (internal) | 115 mA |
| Isolation | 1500 V system/supply |
| Bit width | 2 x 48 bits data 2 x 24 bits control/status (optional) |
| Wire connection | CAGE CLAMP® |
| Cross sections | 0.08 mm² ... 2.5 mm² / AWG 28 ... 14 |
| Stripped lengths | 8 ... 9 mm / 0.33 in |
| Width | 12 mm |
| Weight | 48.5 g |
| EMC: CE - immunity to interference | acc. to EN 61000-6-2 (2005) |
| EMC: CE - emission of interference | acc. to EN 61000-6-3 (2007) |

2-Channel Analog Output Module, 0 ... 10 V / -10 ... +10 V DC

16 bits, configurable



Delivered without miniature WSB markers

The analog output module generates output voltages ranging from 0–10V or $\pm 10V$ for the field.

Output ranges can be configured via WAGO-I/O-CHECK or GSD files.


The module has two short circuit-proof output channels and enables direct connection of two 2-line actuators on the connections AO 1 and ground or AO2 and ground. Signals are output via AO 1 or AO 2. In addition, the sense lines from 4-line actuators can be connected to the connections Sense AO 1 and +Sense AO 1 or Sense AO 2 and +SenseAO2.

Both output channels have a common ground potential.

The output signal is electrically isolated and transmitted with a resolution of 16 bits.

The internal system supply powers the module.

The field power supply is only forwarded to the downstream I/O modules.

| Description | Item No. | Pack. Unit |
|---|-----------------------|------------|
| 2 AO 0/+10V DC 16 Bit | 750-562 | 1 |
| Accessories | | |
| Miniature WSB Quick marking system | | |
|  plain | 248-501 | 5 |
| with marking | see pages 352 ... 353 | |
| Approvals | | |
| Also see "Approvals Overview" in Section 1 | | |
| Conformity marking | CE | |
| UL 508 | | |
| ANSI/ISA 12.12.01 | pending | |
| EN 60079-0, -15 | pending | |
| EN 61241-0, -1 | | |

| Technical Data | |
|------------------------------------|--|
| No. of outputs | 2 |
| Current consumption (internal) | 80 - 170mA |
| Voltage via power jumper contacts | 24 V DC (-1.5 % ... +20 %) |
| Signal voltage | 0 V ... 10 V (switchable) -10 V ... +10 V (switchable) |
| Load impedance | > 5 k Ω |
| Resolution | 16 bits |
| Conversion time (typ.) | 5 ms |
| Recovery time (typ.) | < 300 μ s |
| Measuring error (25 °C) | < ± 0.05 % of the scale end value |
| Temperature coefficient | < ± 100 ppm |
| Isolation | 500 V system/supply |
| Bit width | 2 x 16 bits data 2 x 8 bits control/status (option) |
| Wire connection | CAGE CLAMP® |
| Cross sections | 0.08 mm ² ... 2.5 mm ² / AWG 28 ... 14 |
| Stripped lengths | 8 ... 9 mm / 0.33 in |
| Width | 12 mm |
| Weight | 53.5 g |
| EMC: CE - immunity to interference | acc. to EN 61131-2 (2003) |
| EMC: CE - emission of interference | acc. to EN 61131-2 (2003) |