



9000L Signal Isolator Single/Dual Output

Advanced. Isolated. Reliable

Masibus 9000L Signal Isolator is compact yet rugged 4 wire Isolator used for reliable isolation and attenuation of Industry Standard Field Signals. 9000L is available in Single or Dual output models.

9000L has higher noise rejection ratio that ensures accurate and noise free signal conditioning. Its Compact DIN rail mount design occupies less space and reduces cost of overall installation.

With Dual output option this model also acts as Signal distributor. A typical application could be where the signal has to be distributed for indication on local panel, field control room, main control room or DCS system. The Isolator provides a good protection for sensitive system parts against voltage spikes etc.

An exceptional feature of advanced extended universal power supply for the range of 20V to 265V DC or AC makes 9000L suitable for most of the power supply range available in field thus providing easy installation.

Masibus' 9000L Model offers a good accuracy and stability for reliable operation in hostile environments and full isolation safely separates input channel, each output channel and the power supply.

Features

- Compact DIN rail mount Design of 35mm for Single and Dual output
- Rugged & accurate 4 wire isolator
- Extended Universal Power Supply range: 20V to 265V DC or AC
- 1.5 KV AC three port isolation
- Up to 2 outputs with short circuit Protection
- High CMRR and NMRR
- High output load driving capability
- Wide span adjustment limits
- Front calibration facility via multiturn trimpot

Applications

- Field Interface device
- Isolation of field signals
- Distribution of signals
- Translation of signals
- Factory automation
- SCADA
- DCS
- Impedance matching of transmitters and receiver instruments
- Variable Frequency Drives

TECHNICAL SPECIFICATIONS

| Input | | | Power Supply | |
|-------------------------|---------------|---|--|--|
| | 9000L | 9000L-M | Voltage | 20 to 265V DC/AC, 45Hz-65Hz |
| Input type | Current | Voltage/ Current | Power Consumption | Less than 5VA |
| Input Range | 4 to 20mA | 4 to 20mA 0 to 10V DC | Power ON status LED | Red |
| Input Impedance | ≤100 Ω | Current i/p ≤100 Ω Voltage i/p ≥1 MΩ | Isolation (Withstanding voltage) | |
| Temperature Coefficient | ≤100 ppm/ °C | | Between primary terminals* and secondary terminals**: At least 1.5 KV AC for 1 minute | |
| CMRR | > 100 dB | | Between primary terminals* and grounding terminal: At least 1.5 KV AC for 1 minute | |
| NMRR | > 70 dB | | Between grounding terminal and secondary terminals**: At least 1.5 KV AC for 1 minute | |
| | Output | | Between secondary terminals**: At least 1.5 KV AC for 1 minute | |
| | 9000L | 9000L-M | * Primary terminals indicate power terminals. | |
| Output Type | Current | Voltage/ Current | ** Secondary terminals indicate I/O terminals. | |
| Output Range | 4 to 20mA | 4 to 20mA 0 to 10V DC | Insulation resistance: > 20MΩ@500V DC between All terminals and grounding terminal. | |
| Output Load Resistance | ≤750 Ω | Current o/p ≤750 Ω Voltage o/p ≥2 KΩ | Physical | |
| Accuracy | ± 0.25% of FS | | Mounting Type | DIN Rail (35 mm) |
| Response time | ≤ 50ms | | Terminal Block | UL,CSA standard |
| Output Loop status LED | Green | Not available | Terminal Cable Size | 2.5mm ² |
| | | | Enclosure Material | ABS |
| | | | IP Rating | IP20 |
| | | | Dimension (in mm) | 75(H) x 35.1(W) x 107.25(D) |
| | | | Weight | SOP model: 120 gms Approx DOP model: 150 gms Approx |
| | | | Environmental | |
| | | | Operating Temperature | 0 to 55 °C |
| | | | Relative Humidity | 30 to 95% RH (Non-Condensing) |
| | | | Protection | Conformal Coating on PCB |

Ordering Code

| Model | No of O/P | |
|-------|-----------|-----|
| 9000L | X | |
| | 1 | One |
| | 2 | Two |

| Model | | Input Type | O/P type-1 | | O/P type-2 | | |
|-------|---|------------|------------|---|------------|----------|--------|
| 9000L | M | X | X | | X | | |
| | | C | 4-20mA | 1 | 4-20mA | 0 | None |
| | | G | 0-10V DC | 5 | 0-10V DC | 1 | 4-20mA |
| | | | | | 5 | 0-10V DC | |