



9000C

Signal Isolator

Single / Dual Output

Slim. Isolated. Reliable

Masibus 9000C Signal Isolator is slim yet rugged 4 wire Isolator used for reliable Isolation and Attenuation of Industry Standard Field Signals. 9000C is available in Single or Dual output models.

9000C has higher noise rejection ratio that ensures accurate and noise free signal conditioning. Its Slim 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.

Model 9000C offers a wide range of input/ output signal types which includes mA, mV, VDC which are factory settable as per user requirements. It has built-in transmitter power supply (TPS) to drive field transmitters delivering 0/4-20 mA DC outputs signal. An exceptional feature of Advanced Extended Universal Power Supply for the range of 20V to 265V DC or AC makes 9000C suitable for most of Power Supply range available in field thus providing easy installation.

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

Features

- Slim Design of 12.5mm for Single output and 17.5mm for Dual output
- Rugged & accurate 4 wire isolator
- Compact DIN rail mounting
- Extended Universal Power Supply Range: 20V to 265V DC or AC
- 1.5KVAC Three Port Isolation
- Up to 2 outputs with Short Circuit Protection
- "Active Output" LED indication for both voltage and current outputs
- High CMRR and NMRR
- High output Load Driving Capability
- Wide zero & span adjustment limits
- Front calibration facility Via mutiturn Trimpot
- Hart pass through feature (optional available on request)

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
- Powering of Field Transmitters

Technical Specifications

Input	
Input type	Voltage / Current
Input Range	
Voltage	Min: 0 to ±100mV to Max: 0 to ±10VDC
Current	Min: 0 to ±1mA to Max: 0 to ±30mA
Input Impedance	
Current Input	≤ 51 Ω
Voltage Input	≥ 1M Ω
Temperature Coefficient	≤ 100ppm/°C
CMRR	> 100 dB
NMRR	> 70 dB

Output	
Output Type	Voltage / Current
Output Range	
Voltage	Min: 0 to ±100mV to Max: 0 to ±10VDC
Current	Min: 0 to ±1mA to Max: 0 to ±10mA/+20mA
Response Time	≤ 50ms
Accuracy	± 0.1% of FS
Output Load Capacity	0/4mA to 20mA : ≤ 750 Ω -10mA to +10mA : ≤ 1 KΩ -1mA to +1mA : ≤ 10 KΩ 0 to ± 100mV : ≥ 220 Ω 0 to ± 1V : ≥ 110 Ω 0 to ± 5V : ≥ 510 Ω 0 to ± 10V : ≥ 1 KΩ
Output ON status LED	GREEN

Transmitter Power Supply 24VDC (±10%)@26mA (Current Limited)

Power Supply	
Voltage	20 to 265VDC/AC, 45Hz - 65Hz
Power Consumption	Less than 5VA
Power ON status LED	RED

Isolation (Withstanding voltage)

Between primary terminals* and secondary terminals**: **At least 1.5 KV AC for 1 minute**
 Between primary terminals* and grounding terminal: **At least 1.5 KV AC for 1 minute**
 Between grounding terminal and secondary terminals**: **At least 1.5 KV AC for 1 minute**
 Between secondary terminals**: **At least 1.5 KV AC for 1 minute**

* Primary terminals indicate power terminals.

** Secondary terminals indicate I/O terminals.

Insulation resistance: > 20MΩ@500 V DC between All terminals and grounding terminal.

Physical	
Mounting Type	DIN RAIL (35 mm) Mounting
Terminal Block	UL, CSA standard
Terminal Cable Size	2.5 mm ²
Enclosure Material	ABS
IP Rating	IP20
Size	
For SOP Model (in mm)	99.7(H) x 12.5(W) x 114.7(D)
For DOP Model (in mm)	99.7(H) x 17.5(W) x 114.7(D)
Weight	
For SOP Model	100 gms Approx.
For DOP Model	130 gms Approx.

Environmental	
Ambient Temperature	0 to 55 °C
Relative Humidity	30 to 95% RH (Non-Condensing)
Protection	Conformal Coating on PCB

Ordering Code

Model	Input Type	No of O/P	O/P type
9000C	X	X	X
	C	1 One	1 4-20mA
		2 Two	

Model	Input Type	No of O/P	O/P type-1	O/P type-2
9000C	X	X	X	X
	C	1 One	1 4-20mA	0 None
	D	2 Two	2 0-20mA	1 4-20mA
	E		3 1-5VDC	2 0-20mA
	F		4 0-5VDC	3 1-5VDC
	G		5 0-10VDC	4 0-5VDC
	S	Special	S	5 0-10VDC

*Hart pass through feature (optional available on request-consult factory)