



9000C

Improved Specifications

Signal Isolator

Single (SOP) & Dual (DOP) Output

Slim. Isolated. Reliable



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.

Dual Output 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 good protection to sensitive system parts against voltage spikes etc.

9000C has built-in Transmitter Power Supply (TPS) to drive 2-wire field transmitters. An exceptional feature of extended universal power supply for the range of 20V to 265V DC or AC makes 9000C suitable for any Aux power supply available in field and thus providing easy to stock and easy to install.

9000C 'M' version model is further enhanced with switch selectable I/O configuration for I/O ranges 0/4-20mA, 0/1-5V and 0-10V. This feature allows user to have freedom to change 0/4-20mA, 0/1-5V and 0-10V I/O types, using side DIP switches available on the device and with minor calibration using front accessible trim-pots, depending upon field requirements, truly one model for all signals and all applications.

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

- Extended universal power supply range: 20V to 265V DC or AC
- Slim DIN rail mount design of 12.5mm for single output and 17.5mm for dual output
- Rugged & accurate 4 wire Isolator
- Switch option for 0/4-20mA, 0/1-5V and 0-10V I/O selection
- Full three port isolation
- Up to 2 outputs with short circuit protection
- High CMRR and NMRR
- Negligible long term drift
- CE certified model option
- High output load driving capability
- Wide zero & span adjustment limits
- Front calibration facility via multi turn trimpots

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		Power Supply	
Input Type	Voltage / Current	Supply Voltage	20 to 265V DC/AC 50-60Hz, ≤3W
Input Range	'S' Version: 4-20mA 'M' Version: 0/4 to 20mA, 0/1 to 5V, 0 to 10VDC (DIP switch selection)	Isolation	9000C Aux Powered Model Between power to Input and Output Reinforced insulation according to IEC/EN 61010-1, rated insulation voltage 3KVAC • (For CE marked 9000C SOP 'S' and 'M' model) Galvanic Isolation of 3KVAC for 1 minute (For CE marked and Non-CE model) • Between Input to Output Functional insulation according to IEC/EN 61010-1, rated insulation voltage 1.5KVAC • (For CE marked 9000C SOP 'S' and 'M' Model) Galvanic Isolation of 1.5KVAC for 1 minute (For CE marked and Non-CE model) • Between Output to Output Galvanic Isolation of 1.5KVAC for 1 minute (For Non-CE DOP model)
Input Impedance		Physical	
Current Input	≤10 Ω	Mounting Type	DIN Rail (35mm)
Voltage Input	≥1 MΩ	Terminal Block	UL, CSA standard
Temperature Coefficient	≤100 ppm/°C	Terminal Cable Size	2.5 mm ²
CMRR	>100 dB	Enclosure Material	PA66
NMRR	>70 dB	IP Rating	IP20
Output		Size	
Output Type	Voltage / Current	SOP Model (in mm)	12.5(W) x 100.2(H) x 115.2(D)
Output Range	'S' Version: 4-20mA 'M' Version: 0/4 to 20mA , 0/1 to 5V, 0 to 10VDC (DIP switch selection)	DOP Model (in mm)	17.5(W) x 100.2(H) x 115.2(D)
Response Time	≤50ms	Weight	
Accuracy	± 0.1% of FS mA: ≤750Q@20mA (SOP Model) ≤550Q@20mA (DOP/HART Pass Model)	SOP Model	100 gms approx
Output Load	V: Current≤5 mA (e.g. for 0-5V: 5V/5mA ≥ 1 KΩ)	DOP Model	130 gms approx
Output Loop Status LED	Green ("S" version only)	Environmental	
Transmitter Power Supply	24VDC (±10%) @20mA (SOP) 22VDC (±10%) @20mA (DOP)	Operating Temperature	0 to 55 °C
Directive Conformity		Relative Humidity	30 to 95% RH (Non-Condensing)
Electromagnetic Compatibility Directive 2014/30/EU	*IEC 61326-1 :2012	Protection	Conformal Coating on PCB
Low Voltage Directive 2014/35/EU	*IEC 61010-1 :2010		
*Applicable only for CE marked 9000C SOP Aux Powered 'S' and 'M' Model.			

Ordering Code										
Model		Input Type		No of O/P		O/P Type		CE Compliance		
9000C	S	X		X		X		X		
		C	4-20mA	1	One	1	4-20mA	N		NO
				2	Two			Y		YES*
Model		Input Type		No of O/P		O/P Type-1		O/P Type-2		CE Compliance
9000C	M	X		X		X		X		
		C	4-20mA	1	One	1	4-20mA	0	None	N
		D	0-20mA	2	Two	2	0-20mA	1	4-20mA	Y
		E	1-5VDC			3	1-5VDC	2	0-20mA	
		F	0-5VDC			4	0-5VDC	3	1-5VDC	
		G	0-10VDC			5	0-10VDC	4	0-5VDC	
								5	0-10VDC	

*CE Compliance is available in SOP (Single Output) models only. It is not applicable for DOP (Dual Output) model.