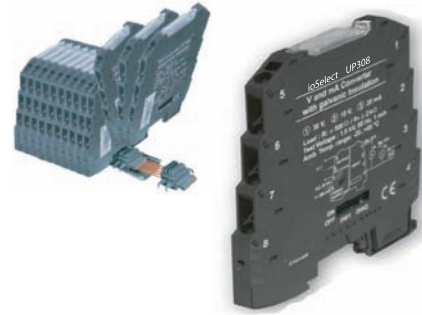


- High Accuracy (better than 0.1%)
- Easy DIP-Switch Configuration
- 1500 Volt (3-way) Isolation
- Ultra Thin - < 1/4"
- Ultra Low Power < 500 mW maximum
- Ultra Reliable – MTBF > 500,000 hours
- Industrial Operating Temperature
- Optional Integrated Power Bus
- The Best Technology & Overall Value



The UniPak™ HD Model UP308 is a configurable, DC powered, DIN rail mount, DC input signal conditioner with 1500 volt isolation between input, output and power. The dip switch selectable input and output ranges on the UP308 offer flexibility and ease of configuration without calibration equipment. The module provides accuracies better than 0.1%. The module's high density package (less than 1/4" thick) makes it ideal where panel space is a premium. Other features include a power bus option, quick connection spring clamp terminals, and front panel diagnostic LEDs. In addition to high performance these units are also highly reliable with a calculated MTBF specification of greater than 500,000 hours over an extended operating temperature range of -40°C to +65°C.

Signal Conditioning made easy from ioSelect, powered by Seneca (K109UI).

General Specifications

Input	
Voltage High	0-15 V, 0-30 V
Input Impedance	325 kΩ
Voltage Low	0-10 V, 2-10 V, 0-5 V, 1-5 V
Input Impedance	110 kΩ
Maximum Voltage	50 V
Current	0-20 mA, 4-20 mA
Input Impedance	35 Ω
Maximum Voltage	24 V
Output	
Voltage	0-5 V, 1-5 V, 0-10 V, 2-10 V
Min. output load	2 kΩ (5 mA @ 10 V)
Max. applied voltage	±30 V
Current	0-20 mA, 4-20 mA, 20-0 mA, 20-4 mA
Max. output load	500 Ω
Max. output protection	~ 25 mA
LED Status	Input out of range Power Presence Internal fault

Performance Specifications

Isolation	1500 Vac 3-way: in-out-pwr
Accuracy	0.08% of f.s. for mA or 5 V output range 0.07% of the f.s. for 10 V output range
Thermal Drift	<120 ppm/K
Response time	35 mS without filter (10-90%) 74 mS with filter
Resolution	14-bit, 1 mV or μA
Humidity	30-90% @ 40 °C
Operating Temperature	-20 to +65 °C (-30 to 150 °F)
Storage Temperature	-40 to 80 °C (-40 to 176 °F)
Power	19.2 to 30 Vdc
Power Consumption	500 mW
Dimensions	6.2 x 93.1 x 102.5 mm (0.244 x 3.67 x 4.035 in)
Weight	50 g (1.8 oz)

Ordering Information:	IOS-UP-308	DC Input Isolating Signal Conditioner
	IOS-K109UI	DC Input Isolating Signal Conditioner
Accessories:	IOS-UP-HDBUS	Din Rail Power Connector (5 dual connectors per package)
	IOS-UP-HDSUPPLY	Smart Power Supply (15 to 75 modules)

Configuration Settings:

Note: The "●" indicates that the DIP-switch is ON. No indication is provided when the DIP-switch is OFF.

Default settings are noted by an asterisk "*".

INPUT SIGNAL			
SW1	1	2	3
	●		0.20 mA *
	●		4.20 mA
	●	●	0.10 Vdc
	●	●	2.10 Vdc
	●	●	1.5 Vdc
	●	●	0.5 Vdc
	●	●	0.30 Vdc
	●	●	0.15 Vdc

FUNCTION			
SW1	7	8	
			Default *
	●		None
	●		SQRT
	●		Tank

INPUT OUT-OF-RANGE			
SW2	4		
	●		5%
		●	2.5%

OUTPUT SIGNAL			
SW2	1	2	3
			0.20 mA *
	●		4.20 mA
	●		20.0 mA ⁽¹⁾
	●		20.4 mA ⁽²⁾
	●	●	0.10 Vdc
	●	●	0.5 Vdc
	●	●	1.5 Vdc
	●	●	2.10 Vdc

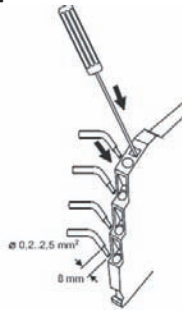
50-60 Hz FREQUENCY REJECTION			
SW1	4		
	●		60 Hz
		●	50 Hz

INPUT FILTER			
SW1	5		
	●		Present
		●	Absent

INVERSION			
SW1	6		
	●		Present
		●	Absent *

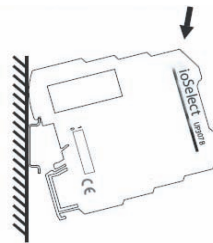
Wiring and Installation Diagrams

Cage Clamp Connection

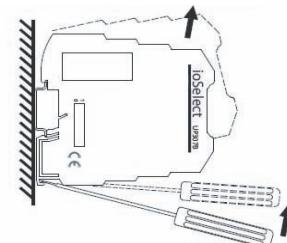


Installation

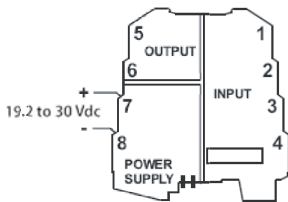
Mount on DIN rail



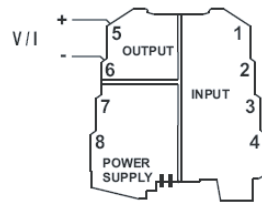
Remove from DIN rail



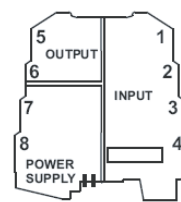
Power Supply



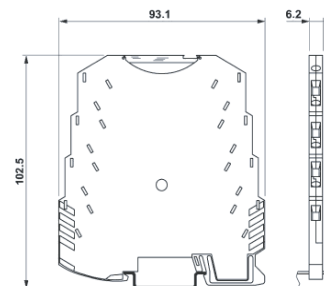
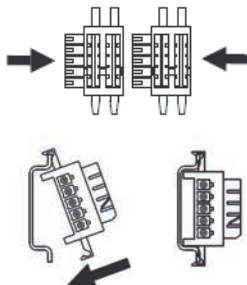
Output



Input



HDBUS Connector



EN50081-2
EN50082-2
EN61010-1
EN60742

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rev: 10/09