

UnipakHD

Compact Signal Conditioners & Isolators



- ANALOG SIGNAL CONDITIONING
- SERIAL REPEATERS & CONVERTERS
- 3-WAY ISOLATION
- WIDE RANGING DESIGNS
- INTEGRATED POWER BUS

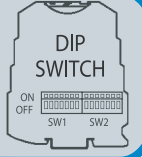
ACCURATE

Better than
0.1% overall
accuracy



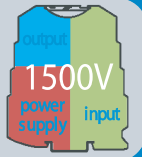
FLEXIBLE

Easy range
configuration
via DIP switch



ISOLATED

1500V 3-way
Isolation



COMPACT

Less than 1/4"
thin, uses less
panel space



LOW POWER

Maximum
consumption
of 500mW



RELIABLE

High MTBF of
more than
500,000 hours



INDUSTRIAL

Extended
Operating
Temperature







ECONOMICAL

The best
technology &
overall value



TECHNICAL FEATURES

MODEL NUMBER	UP318	UP328	UP308	UP307
				
	PT100 / PT1000 converter	Thermocouple converter with alarm trip function	DC/DC Isolator & Analog Converter	Serial converters and repeaters
	RTD Input (PT100/PT1000) Signal Conditioner with 3-way isolation and user selectable input and output ranges.	Thermocouple Input Signal Conditioner with 3-way isolation and user selectable input and output ranges. Includes single relay trip.	DC Input Signal Conditioner with 3-way isolation and user selectable input/output ranges. Includes square root & custom linearization.	RS232/485 serial converter modules with 3-way isolation, full handshaking and automatic flow control.

VERSIONS

UP318-0000 (Pt100)
UP318-1000 (Pt1000)

UP328

UP308 (settable ranges on demand)

UP307A (RS232/RS485)
UP307B (RS485/RS485)

GENERAL DATA

Channels	1	1	1 input, 1 output	1 input, 1 output
Accuracy	0.1 %, or better	0.1 %, or better	0.1 %, or better	
Thermal drift	< 120 ppm/K	< 120 ppm/K	< 120 ppm/K	
LED	• Alarm / Fault	• Alarm / Fault • Static relay output status	• Alarm / Fault	• Power On • Polarity control • SERIAL PORT 1: RS485 Half duplex (31 nodes, terminal, protection up to 30 Vdc) or RS232B • SERIAL PORT 2: RS485 Half duplex (31 nodes, terminal, protection up to 30 Vdc) • Timing automatic handshake • Baud rate: 1200 to 115,200 bps • Terminal • Flow communication stop
Communication				
Other functions	• Programmable fault • Selectable Filtering	• Programmable fault • Selectable Filtering • Settable rejection 50 - 60 Hz	• Square root extraction • Custom Linearization • Signal inversion	

INPUT DATA

PT100 / PT1000 / TC / Voltage / Current	PT100 SENSOR • Pt100 (EN 60751/A2 - ITS90) • Range -150 to +650 °C • Minimum span 50 °C • Power on transmitter 900 µA • 2, 3 or 4 wire RTD's • Max conductor resistance 20 Ohm PT1000 SENSOR • Pt1000 (EN 60751/A2 - ITS90) • Measure range -200 to +210 °C • Minimum span 30°C • 2, 3 or 4 wire RTD's • Power on transmitter < 350 µA • Max conductor resistance 50 Ohm	THERMOCOUPLE • Type: J, K, E, N, S, R, B, T (standard ITS-90) • Temperature range: minimum span 100°C, dip-sw, T/C type • Impedance: 10 MOhm • Cold junction compensation	VOLTAGE • Range: 0-10 / 10-0 / 0-5 / 1-5 V; 0-15 / 0-30 V; • Impedance: 110 kOhm (10 V), 325 kOhm (30 V)	CURRENT • Range: 0-20 / 4-20 mA • Impedance: 35 Ohm
Absolute value		Max voltage ± 32 V	Max voltage ± 32 V, Current clamp self powered: 400 mOhm	

OUTPUT DATA

Voltage	• Range: 0-10 / 10-0 / 0-5 / 1-5 V • Min load resistance 2 kOhm • Protection: 25 mA	• Range: 0-10 / 10-0 / 0-5 / 1-5 V • Min load resistance 2 kOhm • Protection: 25 mA	• Range: 0-10 / 2-10 / 0-5 / 1-5 V • Min output resistance 2 kOhm • Protection: 25 mA	
Current	• Range: 4-20 / 20-4 / 0-20 / 20-0 mA • Max current: overrange 20.5 mA; fault 21 mA, protection 25 mA • Max load resistance: 500 Ohm	• Range: 4-20 / 20-4 / 0-20 / 20-0 mA • Max load resistance: 500 Ohm	• Range: 4-20 / 20-4 / 0-20 / 20-0 mA • Max output resistance: 500 Ohm	
Static relay auxiliary output		• Nominal voltage: 24 Vac/dc • Current: 60 mA • Overvoltage protection: 50 V • Settable alarm threshold / hysteresis		
Response time (10 - 90%)	• < 50 ms (without filter) • < 200 ms (with filter)	• 40 ms (without filter) • 40 / 88 ms (with filter)	• 40 ms (without filter) • 40 / 88 ms (with filter)	
D/A conversion - Resolution		1 mV, 2 µA	1 mV, 2 µA	
Cut off		Programmable	Programmable	