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Terwin μ 500PT Dual Channel process indicator / alarm controller. Applications include simultaneous measurement of pressure and temperature on extruders when fitted to a melt pressure / temperature transducer such as the Terwin 2000 or 5000 series.



Description:

The model μ 500PT is a high performance dual channel process indicator/alarm controller, which can measure and display two process variables simultaneously. A typical application is to use this instrument with a Terwin 2000 or 5000 series extrusion pressure / temperature transducer which incorporates an integral thermocouple.

Channel 1 can be configured for process or temperature inputs and the 2nd channel for strain gauge applications. When used with extrusion melt pressure transducers that employ 6 wire 80% negative shunt calibration, the μ 500PT provides a simple automatic self-calibration feature for both zero and 80% of the applicable pressure range.

The μ 500PT is provided with two alarm relays as standard and these may be directed to channels 1 or 2 as required. Both relays may be configured as 'low' or 'high' with direct or inverse action and two LED indicators provide relay status. Additionally, delays in the relays action may be introduced (up to 20 seconds) and the relays may be latched with manual reset through the front key pads.

Optional outputs include Modbus / RTU RS-485 serial communications and user configurable analogue outputs of 0 – 5V, 0 – 10V, 0 – 20mA or 4 – 20mADC. Also, an optional 24VDC output is available for use with transmitters.

This instrument has CE Certification for Safety, EMI Susceptibility, EMI Emissions, Harmonics and Voltage Fluctuations.

Advantages:

- ✓ **EASY SMART MENU:**

Once you have set the type of input, you only see items on the menu that are applicable to that setting. Saves time and avoids confusion.
- ✓ Programmable range and setpoint alarm functions.
- ✓ **Melt Pressure one button**
Auto Zero & 80% Calibration function.
- ✓ Dual setpoints with relay output on each.
- ✓ **Optional analogue and ModBus / RTU RS-485 outputs (isolated).**
- ✓ 5 digit security password protection.
- ✓ **Switch mode power supply for use on 85-265V 50/60Hz.**
- ✓ **Optional 21 – 53V AC/DC power supply.**
- ✓ **1/8 DIN case (96mm wide x 48mm high) with plug-in electronics for ease of service.**
- ✓ CE approved.

Terwin Instruments Ltd, Winterbeck Industrial Estate, Orston Lane, BOTTESFORD, Nottinghamshire, NG13 0AU – UK
Tel: +44 (0) 1949 84 2000 Fax: +44 (0) 1949 84 2004 E-mail: info@terwin.com www.terwin.com



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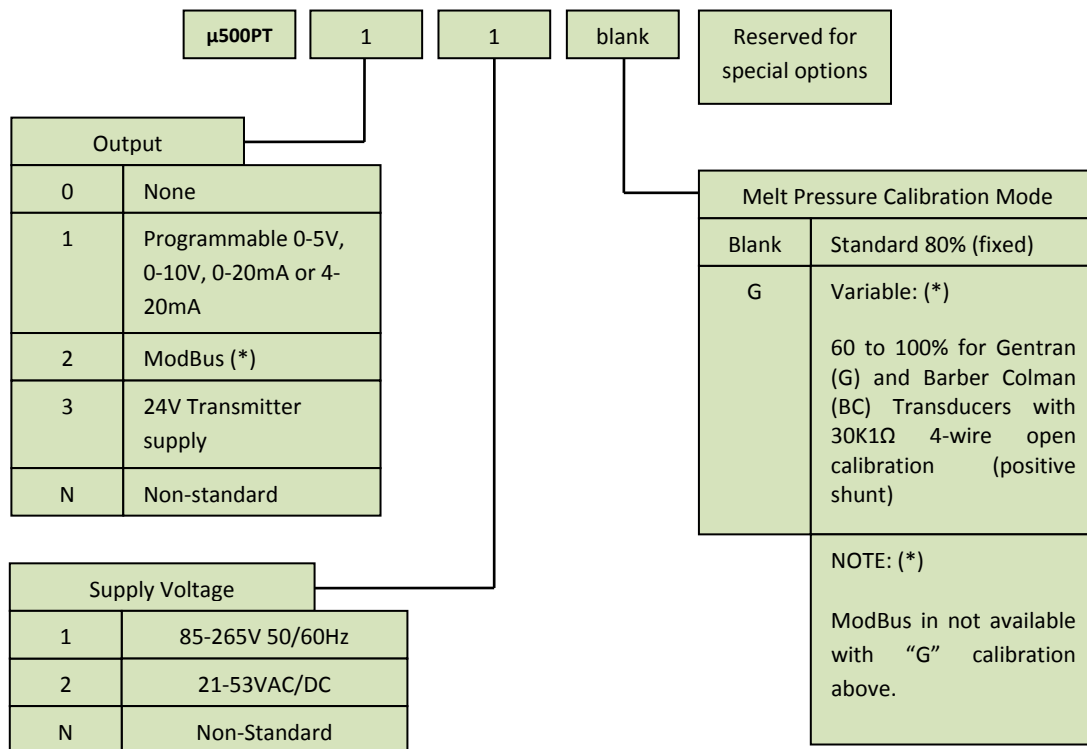
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μ 500PT Part Numbers:



Example:

Terwin model μ 500PT-11 Dual Channel universal programmable process indicator / alarm controller. Fitted with dual alarm relays (programmable), isolated analogue output (programmable) and 85-265V 50/60Hz supply. Case Size: 1/8 DIN.



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Specifications

Displays:	5 digit red LED 10mm (0.394") high, plus 2 alarm indicators.		
Accuracy:	Better than $\pm 0.25\%$ of full scale value (FSV).		
Inputs:	2 independent configurable inputs. Channel 1 is allocated for process and temperature inputs and channel 2 for strain gauge applications i.e. melt pressure.		
	Strain gauge	Melt Pressure 350 Ω – gauge excitation 10VDC @ 100mA	
		Hydraulic pressure transducers	Load cells
	Voltage	0-5V DC	0-10V DC
		Input impedance >1M Ω	
	Current	0-20mA	4-20mA
		150 Ω load	
Thermocouples	J: 0-600°C or 1,112°F	K: 0-1,200°C or 2,192°F	
	L: 0-600°C or 1,112°F	N: 0-1,200°C or 2,192°F	
PT100 3-wire	R: 0-1,600°C or 2,912°F	S: 0-1,600°C or 2,912°F	
	T: 0-400°C or 752°F		
	-99.9°C to +200°C or 0150°F to 392°F		
	-200°C to 600°C or -328°F to 1,112°F.		
Decimal Point:	Programmable through front panel membrane keypad.		
Input Sensitivity:	Applicable to melt pressure transducers only: 1 to 3.7mV/V DC.		
Calibration:	Melt pressure transducers:	Automatic zero and span calibration for melt pressure transducers is provided through the front keypads. For other sensors, please consult the instruction manual.	
Excitation Voltage:	10VDC		
Setpoint Relays – Alarms:	2 SPST relays rated at 1A @250VAC (resistive load). Configurable through front keypads.		
Analogue Outputs:	Optional 0 – 5V, 0 – 10V, 0 – 20mA and 4 – 20mA. User selectable through front keypads and internal DIP switches.		
Serial Communications:	Optional MODBUS / RTU™ protocol.		
Transmitter Supply:	Optional 24VDC @ 40mA.		
Power Supply:	85 – 265V 50/60Hz	Optional 21 to 53VAC/VDC	
Operating Temperature:	0 to 50°C or 122°F		
Storage Temperature:	-10 to 60°C or 140°F		
Relative Humidity:	0 to 95% non-condensing.		
Case:	ABS self extinguishing.		
Dimensions:	96mm wide x 48mm high x 98mm deep (3.78" x 1.89" x 3.86")		
Protection:	IP50		
CE Certification:	Safety, EMI Susceptibility, EMI Emission, Harmonics and Voltage Fluctuations.		



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