

Four Input Load Cell/Strain Bridge Monitor

TP4-WT4 Measures weight, force, pressure, level, etc.

Description

Model TP4-WT4 monitor accepts up to four separate mV/V output load cells or pressure sensors. These inputs may be scaled and viewed individually or may be combined to display the sum. The instrument can function as an intelligent summing display/controller/transmitter, a multichannel manual or automatic cycling display.

All calibration and set up is achieved, by the user, via pushbuttons using easy to follow "on display" messages. Programming functions include, digital filter, relay setpoint parameters, calibration and scaling.

Inputs may be calibrated to display directly in engineering units e.g. kilograms. The instrument retains all calibration values in non volatile memory. Each input can be calibrated using up to 4 calibration points to allow some correction of non linear input signals.

The mV/V range is individually selectable for each input allowing cells or pressure sensors with different mV/V output ranges to be used.

A programmable digital filter improves stability by smoothing out short term interference.

Four setpoint relays are provided, rated 5A, 240VAC (resistive load). These may be individually configured for setpoint level, hysteresis, high and/or low alarm, relay trip delay, normally open or normally closed operation. Relays 2, 3 and 4 can alternatively be configured for trailing operation. A "free fall"/"in flight" value can be assigned to each relay if required e.g. for bag/container filling applications.

Isolated 4-20mA retransmission and non-isolated RS232 communications are provided as standard. External voltage free contact inputs are configurable to perform various functions e.g. tare, zero, peak hold, peak or valley memory batch, setpoint only access or security lock out.

The TP4 may be installed on a convenient flat wall or may be panel mounted using the optional panel mount kit. The case is supplied with attached hood or if preferred for flush mounting the case can be supplied with the hood removed.



Features

- Inputs for up to four separate 4 wire mV/V load cells or pressure sensors
- Readout for individual or sum of inputs
- Ideal for batching, level control, summing etc.
- Pushbutton calibration and setup
- Four setpoint relays with 5 Amp contacts
- Isolated 4-20mA analog retransmission
- RS232 communications (non-isolated) - choice of ASCII or Modbus RTU protocols (type is factory configured)
- Optional isolated RS485 retransmission
- Optional inbuilt data logger, 32k or 128k memory
- Displays directly in engineering units
- Microprocessor based
- Digital filter (improves stability)
- Security lockout of keypad programming functions
- Electrical isolation between input signals/output/power supply
- 240VAC, 110VAC or 12 to 48V DC or AC operation (type is factory configured)
- 6 digit High brightness 20mm LED display
- Display readable from 10 metres away
- Remote switch inputs perform special functions e.g. tare, zero, peak hold, max/min, display hold, batch, setpoint only access or security lockout
- Programmable decimal point
- Wallmount/Weatherproof construction
- Rugged IP65 enclosure
- Two year guarantee



TP4-WT4-3.5-0

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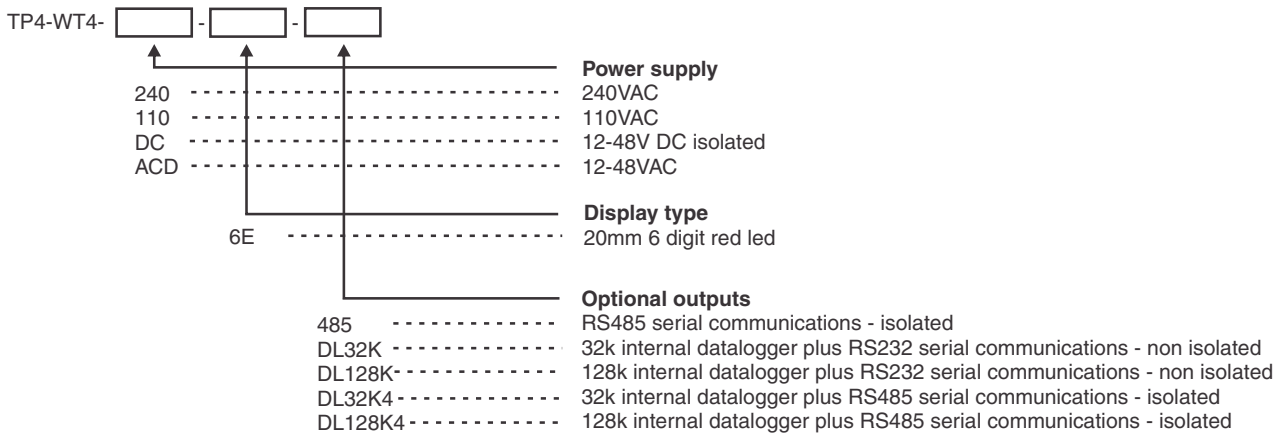
e-mail: sales@aicpl.com.au
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Specifications

Technical Specifications

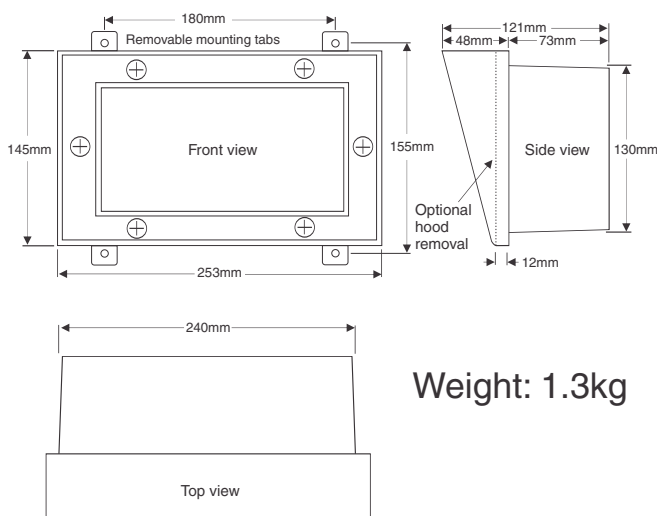
Input Types:	Up to four ratiometric 4 arm strain bridge/pressure transducers
Sensitivity:	0.5mV/V to 250mV/V individually selectable for each input
Excitation Voltage:	5VDC or 10VDC link selectable
Accuracy:	0.005% of full scale (alarms & display). On power up there may be a $\pm 20\mu V$ zero offset on each channel.
Bridge resistance:	80 Ω to >2000 Ω
Sample Rate:	Each channel samples at 5 to 50 samples per second in user selectable ranges
A/D Conversion:	Sigma Delta up to 22 bits resolution
Microprocessor:	MC68HC11 CMOS
Ambient Temperature:	-10°C to 60°C
Humidity:	5 to 95% non condensing
Display:	6 digit red LED, 20mm digit height
Power Supply:	AC 240 or 110V 45/65Hz or DC or AC isolated 12 to 48V (supply type is factory configured)
Power Usage:	AC supply 15VA max, DC supply 10VA max
Outputs (standard):	4 x relays (form A) rated 5A max. 240VAC resistive Isolated 4-20mA retransmission RS232 communications (non-isolated) - choice of ASCII or Modbus RTU
Outputs (optional):	See order codes
Relay Action:	Programmable N.O. or N.C.
Weight:	1.3kg

TP4-WT4 Order Codes

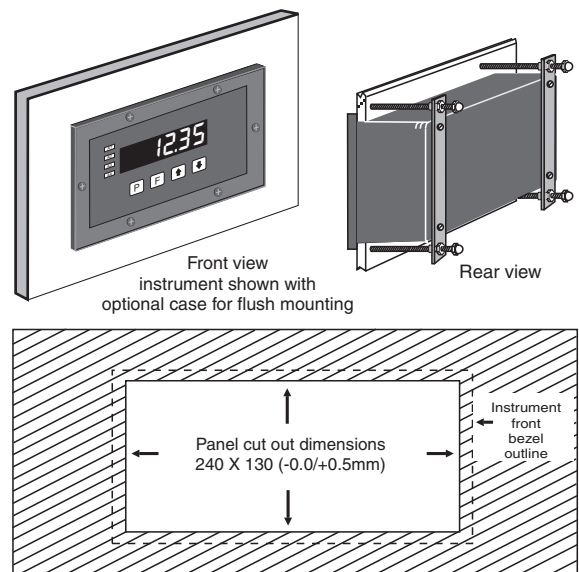


The case can be ordered without a hood, order code: LD-HOOD-REMOVAL. Panel mount kit order code: LD-MTG-PM-KIT.

Dimensions



Panel mounting using optional hardware



TP4-WT4-3.5-0