

TPL-400 digital load cell amplifier for field installation

Silo and tank weighing, level monitoring

- Accuracy 0.05
- Calibration by programmer keys
- Galvanically isolated outputs: 4 20 mA and 0 - 10 VDC
- Tare

- Peak hold
- Set point relays
- Case: plastic, die-cast, or stainless steel, protection class IP65
- DIN/EN 35 rail mounting

The digital TPL-400 load cell amplifier can be used with all types of strain gauge load cells in weighing and force measurement.

Amplifier calibration and output operations defining are done

through the built-in programmer or via an external programming device. Calibration is done simply at two points (e.g. 0 and max) by entering the respective loading data in the memory of the device. Set points are entered by using a programmer, and preact value, hysteresis and latching functions can be linked to them.

Auto tare and peak hold can be activated through external volt-free contact closures.

TPL-400

Technical data

Accuracy	Accuracy class: 0.05 Internal resolution: 130 000 Drift: +/- 2 ppm / °C @ 2,5 mV/V Speed: 10 and 80 readings / s
Environmental conditions	Operating temperature: -10+50 °C
Input voltage	230 VAC -15+10%, 50/60 Hz 10 VA 115 VAC -15+10%, 50/60 Hz 10 VA 9-32 VDC 10 VA
Load cell interface	5 V (max 160 mA), e.g. 10 pcs / 350 Ω load cells Cabling: 4- or 6-wire connection
Analogue output	Galvanically isolated 4 – 20 mA (max 1 $k\Omega$) and 0 – 10 V (max 2 mA) Output inversion selectable Adjustable digital filtering
Set points	2 set point relays, 240 VAC, 5A, latching and inversion options Preact value and hysteresis setting possibilities
Programmer	Built-in (LP1), includes LCD-display 4.5 decades, height 9 mm Hand-held (LP2), size 60 x 120 x 25 mm, LCD-display 4.5 decades, height 9 mm, cable 1,9 m
Directive	Conforms to EMC-directive 2004/108/EC and low-voltage directive 2006/95/EC
Mechanical construction	TPL-400: light-grey ABS case, protection class: IP 65 Case dimensions: width 200 mm, height 120 mm, depth 75 mm Cabling: to 2.5 mm screw connectors through bushings Weight: 780 g
	TPL-400C: die-cast case, protection class: IP65, case dimensions: 220 x 120 x 80 mm TPL-400S: stainless steel case, protection class IP65, case dimensions: 220 x 160 x 85 mm TPL-400D: DIN/EN 35 rail mounting, protection class IP0, dimensions $162 \times 107 \times 100$ mm
TPL-400 Device with analogue outputs 4 – 20 mA and 0 – 10 V in plastic case	

Device configurations (200 x 120 x 75 mm) TPL-400T Device with analogue output 4 – 20 mA and 0 – 10 V in plastic case (200 x 120 x 75 mm), with see-through lid (for use with built-in programmer/display device LP1) TPL-400C Device with analogue output 4 - 20 mA and 0 - 10 V in die-cast case (220 x 120 x 80 mm) TPL-400S Device with analog output 4 – 20 mA and 0 – 10 V in stainless steel case (224 x 160 x 90 mm) TPL-400D Device with analog output 4-20mA and 0-10 V with DIN/EN 35 rail mounting (162x107x100 mm) 0 0 LR1 Set value relay unit, 240 VAC, 5A, latching and inversion possibility LS1 Power supply 110-240 VAC LS3 Power supply 9-32 VDC 0 LP1 Programmer/LCD-display, built-in LP2 Programmer/LCD-display, hand-held TPL-400 - 0 - 0 - LS1 - 0