



mV transmitter



2261

- Load cell amplifier
- mV to current / voltage conversion
- Front-programmable / LED display
- Relative calibration of input span
- NPN / PNP input for external taring
- Supply for standard transducers



Advanced features

- A multifunction user interface consisting of three pushbuttons and a 3-digit LED display for programming.

Application

- The 2261 converts bipolar mV signals from transducers supplied directly by the device to standard current / voltage signals.
- The 2261 is suitable for load cell application as well as other applications such as tank filling and draining, weighing with a taring function, measurement of cable tensile force, level control, signal conversion / amplification etc.

Technical characteristics

- Front error LED.
- The analog input can be programmed for voltage in the range -40...100 mVDC.
- The digital signal can be selected as either NPN or PNP.
- Taring can either be by way of the digital input or from the front interface.
- The analog output can be programmed to current in the range 0...20 mA or voltage in the range 0...10 VDC.
- Transducer supply which can be programmed to 5...13 VDC from the front. It is up to the customer to ensure a max. load of 230 mA (e.g. 6 parallel 350 Ω load cells).
- Sense input (with transducer supply used) for compensation for cable resistance to the transducer.
- Mounting for a standard 11-pole socket which can be adapted for DIN rail or plate use with PR's 7023 adaptor and 7024 mounting keying.

Order:

Type
2261

Environmental Conditions

Operating temperature.....	-20°C to +60°C
Calibration temperature.....	20...28°C
Relative humidity.....	< 95% RH (non-cond.)
Protection degree.....	IP50

Mechanical specifications

Dimensions (HxWxD).....	80.5 x 35.5 x 84.5 mm (D is without pins)
Weight approx.....	130 g

Common specifications**Supply**

Supply voltage.....	19.2...28.8 VDC
Max. required power.....	7.2 W
Internal power dissipation.....	2.2 W

Response time

Response time (programmable).....	0.06...999 s
Signal / noise ratio.....	Min. 60 dB
Updating time.....	20 ms
Signal dynamics, input.....	17 bit
Signal dynamics, output.....	16 bit
Effect of supply voltage change.....	< $\pm 0.002\%$ of span / %V
Temperature coefficient.....	< $\pm 0.01\%$ of span / °C
Linearity error.....	< 0.1% of span
Auxiliary voltage: Transducer supply.....	5...13 VDC
Load (max.).....	230 mA
EMC immunity influence.....	< $\pm 0.5\%$ of span

Input specifications**Common input specifications**

Max. offset.....	70% of selec. max. value
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Voltage input

Measurement range.....	-40...100 mV
Min. measurement range (span).....	10 mV
Input resistance.....	> 10 M Ω
Overrange.....	0...999% of selected measurement range
NPN, digital input.....	Pull up 24 VDC / 6.9 mA
PNP, digital input.....	Pull down 0 VDC / 6.9 mA
Trig level low, NPN/PNP.....	< 6 VDC
Trig level high, NPN/PNP.....	> 10.5 VDC
Pulse length.....	> 30 ms

Output specifications**Current output**

Signal range.....	0...20 mA
Min. signal range.....	5 mA
Load (@ current output).....	$\leq 600 \Omega$
Load stability.....	$\leq 0.01\%$ of span / 100 Ω
Current limit.....	< 23 mA
Voltage output through internal shunt.....	See manual for details
of span.....	= of the presently selected range

Observed authority requirements

EMC.....	2014/30/EU
RoHS.....	2011/65/EU
EAC.....	TR-CU 020/2011

For pricing or any further information, please contact Omni Instruments Ltd.



Measurement and data acquisition solutions

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