

USB programmable! Free software at
www.defineinstruments.com/toolbox



E2180

TM-2HL Common Specifications

Configuration 2-wire 4–20mA (loop powered)

Power supply 9.5–36V DC

Supply voltage sensitivity $< \pm 0.005\%/V$ FSO

Output load resistance 700 Ω at 24V DC (50 Ω /V above 9.5V DC)

Maximum output current Limited to $< 28\text{mA}$ (Emission & immunity)

EMC compliance Emissions (EN 61326). Immunity (EN 61326). Safety (EN 61010-1).

Accurate to $< \pm 0.03\%$ FSO typical

Ambient drift $< \pm 0.003\%/^{\circ}\text{C}$ FSO typical

Noise immunity 125dB CMRR average (2.0kV DC limit)

R.F. immunity $< 1\%$ effect FSO typical

Response time 400msec typical (10–90% 300msec typical)

Operating temperature -20 to 65 $^{\circ}\text{C}$ (-4 to 149 $^{\circ}\text{F}$)

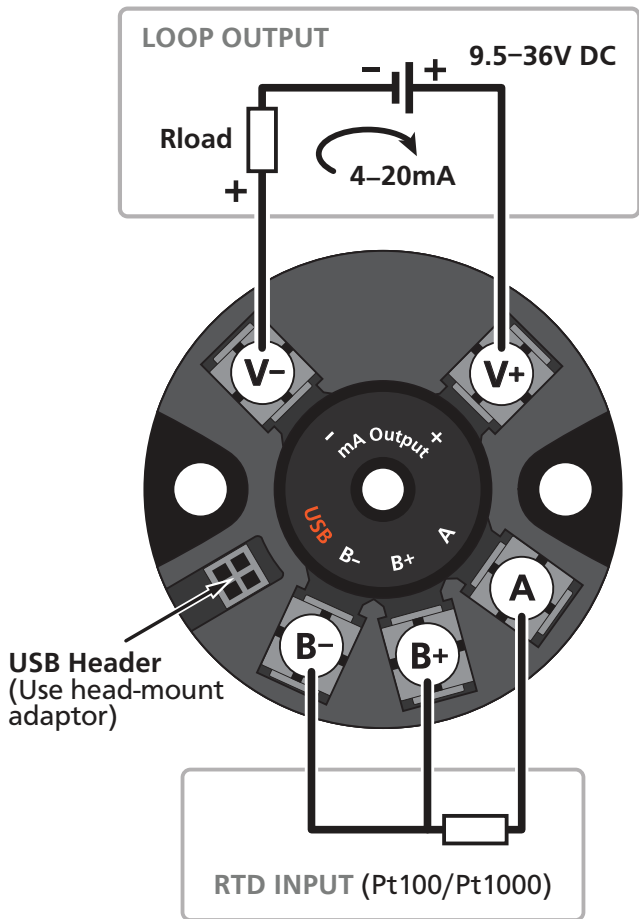
Storage temperature -20 to 100 $^{\circ}\text{C}$ (-4 to 212 $^{\circ}\text{F}$)

Operating humidity 5–85%RH max (non-condensing)

Casing (H x W x D) Head mount 23 x 44 x 44mm (0.91 x 1.73 x 1.73")



Wiring



RTD Input Specifications

RTD input PT100 or PT1000 DIN 3-wire type (2-wire can be used with offset calibration)

Sensor current 0.15mA nominal

Lead wire resistance PT100: 10 Ω /wire max. PT1000: 5 Ω /wire max.
0.02% FSO offset error per Ω of lead resistance.

Accuracy $\leq 0.3^{\circ}\text{C}$

USB programmable zero 0– $\pm 99\%$ of the span

USB programmable span -200 to 850 $^{\circ}\text{C}$ (-328 to 1562 $^{\circ}\text{F}$)


Sensor break output drive Function high upscale/low downscale

Linearity (PT100) 0.02% FSO for span inputs $\leq 200^{\circ}\text{C}$ (392 $^{\circ}\text{F}$)
0.1% FSO for span inputs $\leq 850^{\circ}\text{C}$ (1562 $^{\circ}\text{F}$)

Linearity (PT1000) 0.02% FSO for span inputs $\leq 200^{\circ}\text{C}$ (392 $^{\circ}\text{F}$)
0.2% FSO for span inputs $\leq 520^{\circ}\text{C}$ (968 $^{\circ}\text{F}$)




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