

# TM - 2HL

NON-ISOLATED TRANSMITTER

USB programmable!

For driver and manual  
see our website:

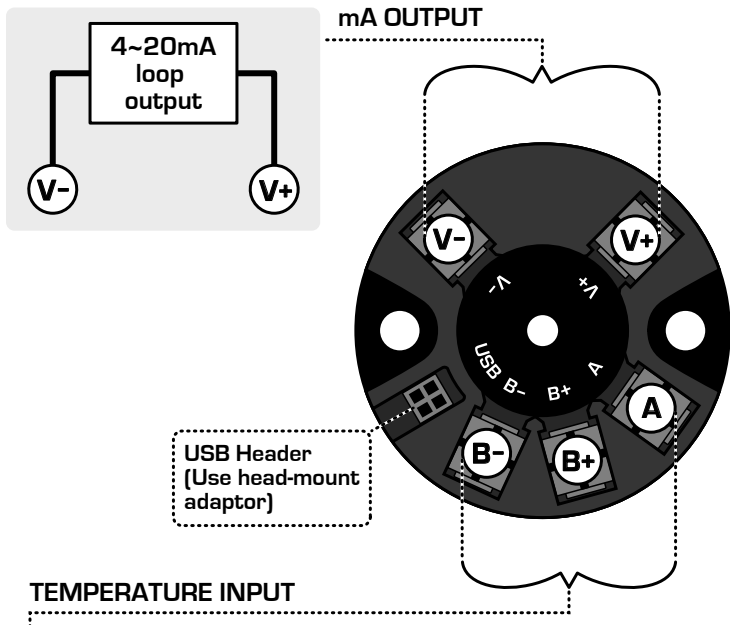
[www.texmate.co.nz/tm](http://www.texmate.co.nz/tm)

## TM - 2HL COMMON SPECIFICATIONS



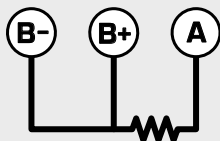
<i>Configuration</i>	2-wire 4~20mA (loop powered)
<i>Power supply</i>	9.5-36V DC
<i>Supply voltage sensitivity</i>	$< \pm 0.005\% / V_{FSO}$
<i>Output load resistance</i>	700 $\Omega$ at 24V DC (50 $\Omega / V$ above 9.5V DC)
<i>Maximum output current</i>	Limited to $< 28mA$ (Emission and immunity)
<i>Emissions compliance</i>	EMC EN 61326
<i>Immunity compliance</i>	EMC EN 61326
<i>Safety compliance</i>	EMC EN 61010-1
<i>Accurate to</i>	$< \pm 0.03\%_{FSO}$ TYPICAL
<i>Ambient drift</i>	$< \pm 0.003\% / ^\circ C_{FSO}$ TYPICAL
<i>Noise immunity</i>	125dB CMRR AVERAGE (2.0kV DC limit)
<i>R.F. immunity</i>	$< 1\%$ effect $_{FSO}$ TYPICAL
<i>Response time</i>	400msec TYPICAL (10-90% 300msec TYPICAL)
<i>Operating temperature</i>	-20 - +65 $^\circ C$
<i>Storage temperature</i>	-20 - +100 $^\circ C$
<i>Operating humidity</i>	5 - 85%RH MAX (non-condensing)
<i>Mounting</i>	Head mount
<i>Dimensions</i>	44 x 44 x 23mm (H x W x D)

## WIRING

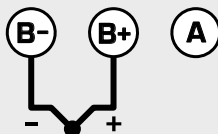


## TEMPERATURE INPUT

RTD (Pt100, Pt1000)



T/C (B, E, J, K, N, R, S, T)



## T/C INPUT SPECIFICATIONS

<i>Thermocouple types</i>	B, E, J, K, N, R, S, T
<i>USB programmable zero</i>	0-±99% of the span
<i>Input impedance</i>	1MΩ MIN
<i>T/C lead resistance</i>	100Ω MAX
<i>Cold junction</i>	-20-+90°C
<i>Accuracy</i>	E, J, K, N, T < ±2°C B, R, S < ±3°C
<i>Temperature drift</i>	E, J, K, N, T < ±0.05°C B, R, S < ±0.2°C
<i>CJC error</i>	< ±1°C
<i>Sensor break output drive</i>	Function high upscale / low downscale

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## RTD INPUT SPECIFICATIONS

<i>RTD input</i>	Pt100 or Pt1000 DIN 3-wire type. (2-wire can be used with offset cal)
<i>Sensor current</i>	0.15mA nominal
<i>Lead wire resistance</i>	Pt100: 10Ω/wire MAX Pt1000: 5Ω/wire MAX 0.02% FSO offset error per Ω of lead resistance
<i>Accuracy</i>	≤0.3°C
<i>USB programmable zero</i>	0-±99% of the span
<i>USB programmable span</i>	-200-+850°C
<i>Sensor break output drive</i>	Function high upscale / low downscale
<i>Linearity (Pt100)</i>	0.02% FSO for span inputs ≤200°C 0.1% FSO for span inputs ≤850°C
<i>Linearity (Pt1000)</i>	0.02% FSO for span inputs ≤200°C 0.2% FSO for span inputs ≤520°C



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