DATA SHEET – Process Automation– Loop TX.

MODEL:- LPSC-xxx

LoopPowered Signal Conditionerseries 4-20mALoop Powered

The LPSC-xxxis a series of loop powered two wire transmitters, the LPSC drawenergy from the 4-20mA loopto functionand at the same time provides a proportional 4-20mA signal relative to the input.

The LPSC series accommodates inputs such asACvoltage, AC Current from CT, millivolts dcVolts dc, milliamps dc, RTD, T/C and a SW(slide wire) inputs.
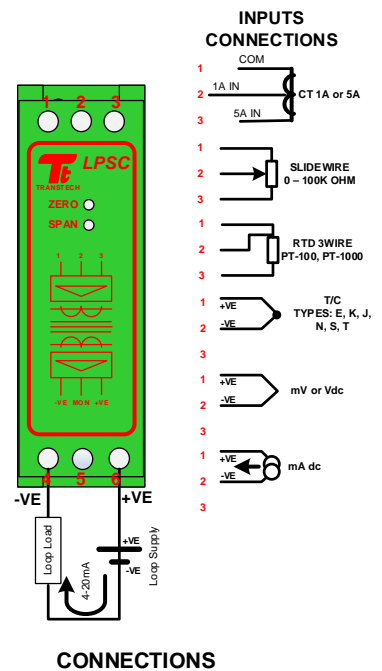
FEATURES

- Full galvanic isolation
- Both DIN and G Rail mounting
- External monitor points (40 to 200mV)
- External span and zero
- Very small footprint area 25mm wide

INPUTS CONNECTIONS

CONNECTIONS

GENERAL SPECIFICATION

Supply Voltage1	2 to 48Vdc
Loop Resistance	250 ohms
Long term drift	< 0.1% of span per 10,000hrs
Isolation Level	1500V dc.
Creepage distance	≥2.5mm. (port to port)
Output Noise	3.2µA rms. (typical).
Accuracy	0.25% of span
Linearity	0.25% of span
Repeatability	0.25% over 10,000hrs
CMR (50/60Hz)	Typically 110dB
Response time	Nominally 250mS10 to 90%step
Operating Temp	-25 to 75 Deg. C
Storage Temp	-55 to 85 Deg. C
Terminals	Self Opening 2.5mm2
Housing Material	KRILEN
Dimensions	79mm X 85mm X 25mm
Weight	130 grams
Load Calculation:	The LPSC series work on a wide voltage range, the maximum load can be calculated as below:

$$\text{Load (ohms)} = \frac{V_{supply} - 12}{0.020}$$

HOUSING DIMENSIONS

TECHNICAL DATA

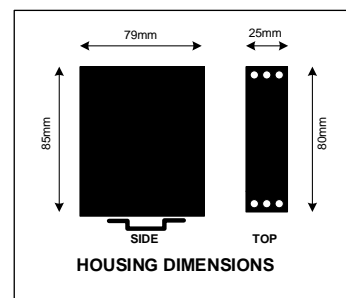|	
Supply Voltage	12Vdc to48Vdc
Supply Power	Loop powered
TwoPort Isolation	500V nominal
Input Types available:	
ACI	CT secondary either 1Amp or 5Amp
ACV	0-300Vac
RTD	3 WirePT-10, PT-100, PT-1000 - MinSpan 30Deg C
SW (slide wire)	2 & 3 Wire 0-5k Ohm, 0-10k Ohm - MinSpan 10 Ohms
T/C	E, J, K,N, S, TMin Span 8mV
VC	0-300V or 0-50mA – Min Span 5mV or 1mA
Output	4 to 20mA only
Loop Resistance1	Approx. 250ohms/loop maximum