Head Mount Temperature Transmitter

TxBlock-USB

CE RoHS REACH COMPLIANCE · ISO 9001 EMPRESA CERTIFICADA · 3 YEARS WARRANTY · EXPORTED TO MORE THAN 60 CONTRIES
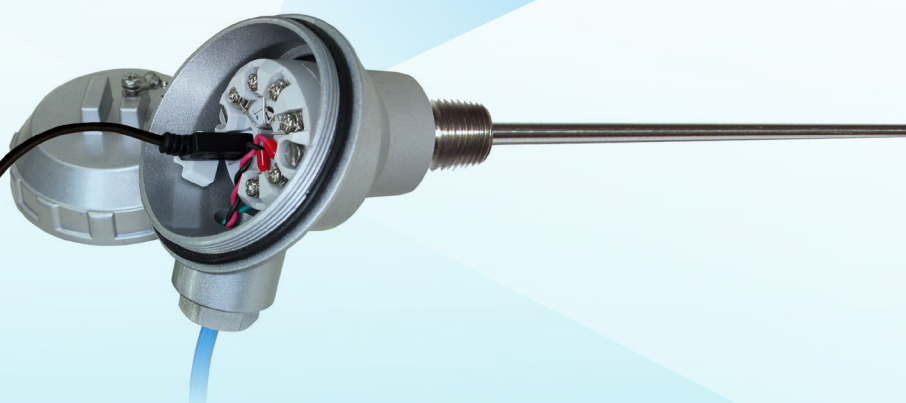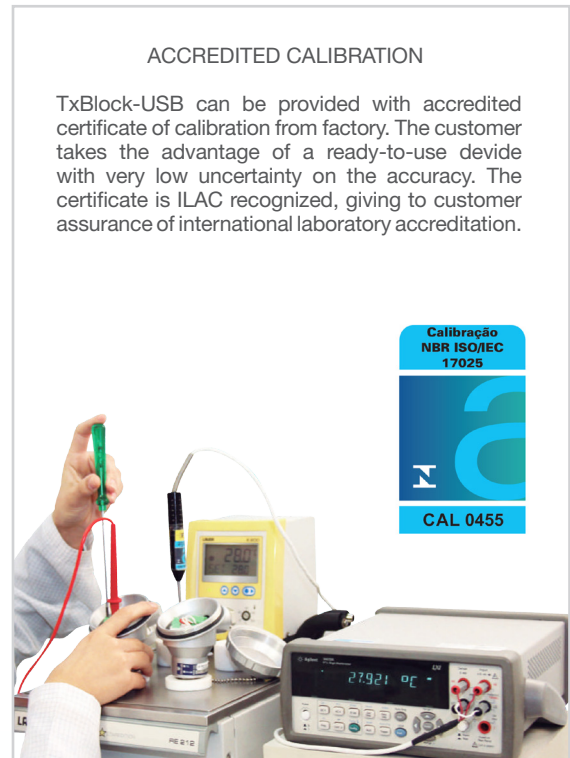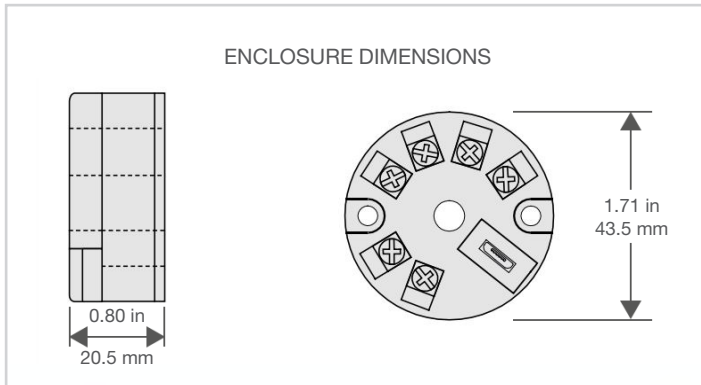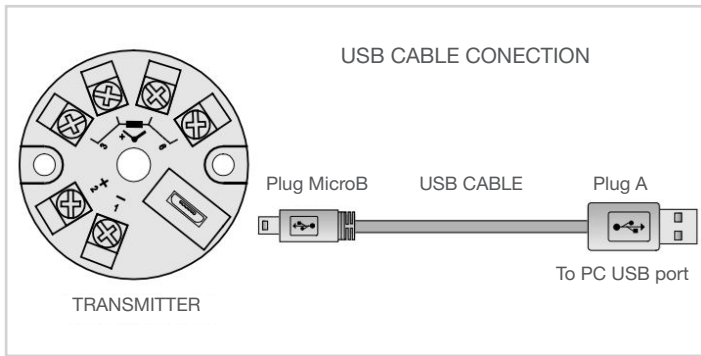
- ✓ Sensor type **flexibility**
- ✓ Easy USB **configuration**
- ✓ Excellent **robustness** against interferences
- ✓ Fully r**angeable**
- ✓ Field **calibration** fine tuning

TxBlock-USB is an excellent and powerful high-accuracy loop-powered head mounted temperature transmitter. It accepts several types of sensors – thermocouples, Pt100, Pt1000, NTC and 0-50 mV signal – all-in-one model, with linearized 4-20 mA output and configurable measurement range. It allows 2 points calibration for field tuning and can be supplied also with accredited calibration certificate according to

ILAC recognition, and additionally can be supplied already preconfigured with customer parameters. As a world class device, TxBlock-USB is compliant with the leading standards of electromagnetic compatibility, and is highly immune and reliable device for industrial environment.

The innovative built-in USB port allows configuration, easy commissioning and fine tuning on periodic calibration reviews.

NOVUS
We Measure, We Control, We Record

USB CABLE CONECTION

TRANSMITTER

Plug MicroB　　　USB CABLE　　　Plug A

To PC USB port

ENCLOSURE DIMENSIONS

1.71 in
43.5 mm

0.80 in
20.5 mm

ACCREDITED CALIBRATION

TxBlock-USB can be provided with accredited certificate of calibration from factory. The customer takes the advantage of a ready-to-use devide with very low uncertainty on the accuracy. The certificate is ILAC recognized, giving to customer assurance of international laboratory accreditation.

Calibração
NBR ISO/IEC
17025

CAL 0455

Sensor Input	Sensor Type	Measurement Range	
	Thermocouple K	-150 to 1370 ºC	(-238 to 2498 ºF)
	Thermocouple J	-100 to 760 ºC	(-148 to 1400 ºF)
	Thermocouple R	-50 to 1760 ºC	(-58 to 3200 ºF)
	Thermocouple S	-50 to 1760 ºC	(-58 to 3200 ºF)
	Thermocouple T	-160 to 400 ºC	(-256 to 752 ºF)
	Thermocouple N	-270 to 1300 ºC	(-454 to 2372 ºF)
	Thermocouple E	-90 to 720 ºC	(-130 to 1328 ºF)
	Thermocouple B	500 to 1820 ºC	(932 to 3308 ºF)
	Pt100 (2-wire, 3-wire and 4-wire)	-200 to 650 ºC	(-328 to 1202 ºF)
	Pt100 (3-wire)	-200 to 650 ºC	(-328 to 1202 ºF)
	NTC (2-wire)	-30 to 120 ºC	(-22 to 248 ºF)
	0-50 mV	0 to 50 mV	

Temperature Unit	ºC or ºF, software selectable		

Accuracy	Sensor Type	Typical	Minimum
	Pt100 / Pt1000 (-150 to 400 ºC) or (-238 to 752 ºF)	0.10%	0.12%
	Pt100 / Pt1000 (Full Range)	0.13%	0.19%
	Tc K, J, T, E, N, R, S, B	0.1% ±1 ºC (±1.8 ºF)	0.15% ±1 ºC (±1 ºF)
	mV	0.1%	0.15%
	NTC	0.3%	0.7%

Measurement Compensation	Thermocouple	Cold junction compensation	
	Pt100	Cable compensation for 2-wire, 3-wire and 4-wire	
	Pt1000	Cable compensation for 2-wire and 3-wire	

Output	Output Signal	Linearized 4-20 or 20-4 mA current, 2 wire	
	Resolution	2 µA	

Temperature Effect	±0.16% / 25 ºC (77 ºF)		

Response Time	Typical 1.6 sec		

Power Supply	10 to 35 Vdc		

Operating Conditions	Temperature	-40 to 85 ºC (-40 to 185 ºF)	
	Humidity	0 to 90% RH	

Approvals / Standards	CE NAMUR NE43 compliant RoHS compliant EN 61326-1: 2006 conformity		

Protection	Internal protection against reverse polarity		

Isolation	No electrical isolation between input and output		

Dimensions	43.5 mm (diameter) x 20.5 mm (height)	1.71 in (diameter) x 0.80 in (height)		

Wire Cross Section	0.14 to 1.5 mm² (26 AWG to 15 AWG)		

Housing Material	ABS UL94-HB (standard impact strength, flaming resistance and antistatic)		

Mounting	DIN form B sensor head		

Interface Communication	USB micro-B type, with silicon cover protection		

Configuration	TxConfig II for Windows PCs TxConfig for Android smartphones	Avaiable on www.novus.com.br/downloads Avaiable on Google Play	

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