



# ATT1 – SIGNAL TRANSMITTER

## FOR ALL SENSORS

- Input from RTD (Pt100, Pt 1000, Ni100), TC (B, E, J, K, N, R, S, T) and mV (-10... +70 mV);
- Potentiometer (10... 400  $\Omega$ /10... 4 k $\Omega$ );
- Three custom linearizations (up to 96 segments);
- Reversible output (e.g.: 20... 4 mA);
- Accuracy: better than 0.2% fs;
- Isolated version available;
- Configurable by PC plus RF programmer or by smartphone (using a free of charge APP);
- Cold junction compensation disabling;
- Programmable retransmitted range;
- Operating temperature: -40... +85°C;
- Compliance with CE, EN 61326-1;
- Calibration according to EN 60584-1: 2013, EN60751: 2008.

### FIELDS OF APPLICATIONS

- MACHINE TOOLS;
- OLEODYNAMIC SYSTEMS;
- COOLING AND LUBRICATION SYSTEMS;
- ALL KINDS OF PLANTS;
- CONVERSION OF A LINEAR mV SIGNAL INTO A STANDARD 4... 20 mA SIGNAL;
- LINEARIZATION OF NO STANDARD SENSORS.

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COMPANY WITH  
MANAGEMENT SYSTEM  
CERTIFIED BY DNV GL  
= ISO 9001 =  
= OHSAS 18001 =

# SPECIFICATION (@ 20°C)

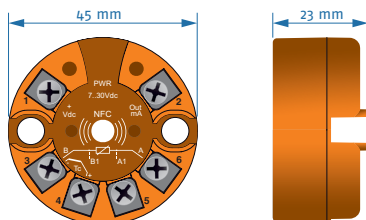
## - Sensor Types

<b>Pt100</b>	Measuring range:	-200... +800°C,
	Connection:	2, 3, 4 wires,
	Accuracy:	0.1 % FS ±10 µA;
<b>Pt1000</b>	Measuring range:	-200... +800°C,
	Connection:	2 wires,
	Accuracy:	0.1 % FS ±10 µA;
<b>Ni100</b>	Measuring range:	-60... +180°C,
	Connection:	2, 3, 4 wires,
	Accuracy:	0.5 % FS ±10 µA;
<b>TC B</b>	Measuring range:	+40... +1820°C;
<b>TC E</b>	Measuring range:	-200... +940°C;
<b>TC J</b>	Measuring range:	-200... +1200°C;
<b>TC K</b>	Measuring range:	-200... +1340°C;
<b>TC N</b>	Measuring range:	-200... +1280°C;
<b>TC R</b>	Measuring range:	-40... +1760°C;
<b>TC S</b>	Measuring range:	-40... +1760°C;
<b>TC T</b>	Measuring range:	-200... +400°C;
<b>mV</b>	Measuring range:	-10... +70 mV,
	Accuracy:	0.1 % FS;
<b>Potentiometer low</b>		10... 400Ω,
	Connection:	2, 3, 4 wires,
	Accuracy:	0.1% FS ±10 µA;
<b>Potentiometer High</b>		10... 4 kΩ,
	Connection:	2 wires,
	Accuracy:	0.1 % FS ±10 µA.

## - General specifications

RTD excitation current < 200 µA;  
RTD maximum wire resistance: 20Ω per wire;  
TC input total accuracy: 0.2% FS ±10 µA (for B thermocouple, this accuracy can be obtained only in the range 400... 1820°C);  
CJ accuracy: ±0.5°C;  
CJ thermal drift: 0.1°C/°C;  
Operating range: 7... 30 Vdc;  
Current output: 4... 20 mA (2 wires);  
Output resolution: 2 µA;  
Over-range output: +5°C;  
Under-range output: -5°C;  
Failure output: Selectable between 21 mA, 3.8 mA or any other value;  
Rejection: 50... 60 Hz;  
Temperature drift: < 100 ppm;  
Sampling time: 300 ms;  
Response time (10%input, 90% output):  
- No filter: 200 ms,  
- Medium filter: 2 s,  
- Strong filter: 4 s;  
Isolation: 1000 Vac for 1 minute (isolated version only);  
Protection: IP 20;  
Compliance: CE, EN 61326-1;  
Operating temperature: -40... +85°C;  
Humidity: 30... 90% @ 40°C (non condensing);  
Storage temperature: -40... +105°C;  
Connections: Screw terminals;  
Enclosure: PA66;  
Dimensions: Ø45 mm, thickness 23 mm.

## DIMENSIONS



## ACCESSORIES (AFC1: NFC Programmer Kit)



## CONFIGURATION

The **ATT1** configuration can be performed with two different tools:

- An Android smartphone equipped with **NFC** capabilities and **ATNFC APP** or
- A "Windows" PC equipped with the **RF programmer (AFC1)** and **ATNfcSoft** program.

Both programs can be downloaded free of charge from the download area of our website: [www.ascontecnologic.com](http://www.ascontecnologic.com)

Using these tools it's possible to: configure the type of sensor, the retransmitted range, etc., to store all the desired configurations, to send a stored configuration to a new device, print all the data. Moreover, with ATNfcSoft, the user will be able to freely prepare and download his customized linearization.

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