

# 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 (0... 400  $\Omega$ /0... 4 k $\Omega$ );
- Three custom linearizations (up to 96 segments);
- Reversible output (e.g.: 20... 4 mA);
- Accuracy: better than 0.2% fs;
- 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)

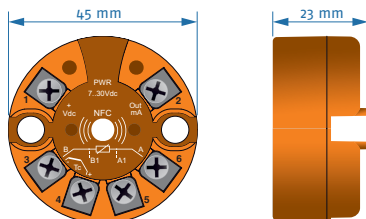
## - Sensor Types

- PT100 Measuring range: -200... +800°C,  
Connection: 2, 3, 4 wires,  
Accuracy: 0.1 % FS ±10 µA;
- PT1000 Measuring range: -200... +800°C,  
Connection: 2 wires,  
Accuracy: 0.1 % FS ±10 µA;
- NI100 Measuring range: -50... +170°C,  
Connection: 2, 3, 4 wires,  
Accuracy: 0.5 % FS ±10 µA;
- TC B Measuring range: +40... +1820°C;  
(max. accuracy: +400... +1820°C);
- TC E Measuring range: -200... +940°C;
- TC J Measuring range: -200... +1200°C;
- TC K Measuring range: -200... +1340°C;
- TC N Measuring range: -200... +1280°C;
- TC R Measuring range: -40... +1760°C;
- TC S Measuring range: -40... +1760°C;
- TC T Measuring range: -200... +400°C;
- mV Input measuring range: -10... +70 mV,  
Accuracy: 0.1 % FS;
- Potentiometer low: 0... 400Ω,  
Connection: 2, 3, 4 wires,  
Accuracy: 0.1% FS ±10 µA;
- Potentiometer High: 0... 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;
- CI accuracy: ±0.5°C;
- CI 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;
- Current output protection: 30 mA approx.;
- Rejection: 50... 60 Hz;
- Accuracy: Better than 0.2% range;
- Temperature drift: < 100 ppm;
- Sampling time: 300 ms;
- Response time (10%input, 90% output)
  - No filter: 200 ms,
  - Medium filter: 1 s,
  - Strong filter: 4 s;
- Protection: IP 20;
- Compliance: CE, EN 61326-1;
- Operating temperature: -40... +85°C;
- Humidity: 30... 90% @ 20°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 **AT1** 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 **ATNFC-Soft** program.

Both programs can be downloaded free of charge from the download area of our website:

<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 ATNFC-Soft, the user will be able to freely prepare and download his customized linearization.

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