

## Industrial Smart Temperature Transmitter

### Model: MDTT

#### Applications

- Monitoring of plants
- Control and regulation of processes
- For gaseous and liquid aggressive
- Process industry: Chemical/petro chemical, power stations, food and beverage, offshore oil rigs, pulp and paper, environmental technology, machine building and general plant construction

#### Special features

- Accuracy 0.075 and 0.04,0.02
- Dual and single sensor input
- Best accuracy, reproducibility and long-term stability
- Local zero and span adjustments
- The wide LCD and bargraph indicator
- Intrinsically safe and explosion proof
- Easy menu-guided commissioning via local display,
- Out put 4 to 20mA with HART, PROFIBUS PA, FOUNDATION Fieldbus
- Cost savings with modular concept for easy replacement of sensor, display or electronics
- Multi input RTD, Thermocouples & millivolt



#### Description

- |                           |   |
|---------------------------|---|
| ■ Accuracy class          | 0.075 standard and 0.04,0.02 (option)   |
| ■ Accuracy stability      | Accuracy will be held for the nominal range for a minimum of 3 years            |
| ■ Transfer function       | Linear  |
| ■ Response time           | 0.1 second  |
| ■ Sensor material         | Stainless steel 316, Stainless steel 316L<br>Hastelloy, Monel, Tantalum(option) |
| ■ Process connection      | Stainless steel 316, Stainless steel 316L<br>Hastelloy, Monel, Tantalum(option) |
| ■ Temperature comp. range | -20 to +85 °C   |
| ■ Ambient temperature     | -40 to +85 °C   |

■ Out put error	$\pm 0.04 * Z ^\circ C$
■ Damping	0...60 sec adjustable
■ Long stability	$\pm 0.1\%F.S/year$
■ Protection	IP67
■ Power supply	10 - 36VDC
■ Output signal	4 ... 20mA, 0.5 ... 4.5VDC, 1 ... 5VDC, 1 ... 10VDC
■ Intrinsically safe	II 1/2 Ex ia IIC T4/T5
■ Explosion-proof	II 1/2 Exia/d IIC T5/T6
■ Pressure port	1/2NPTF, 1/4NPTF or customize
■ Housing material	Aluminum, Stainless steel
■ Message	Self diagnosis message
■ Conduit entry size	1/2NPTF or M20*1.5
■ shock	50g /11ms
■ Pressure limit	360 psi

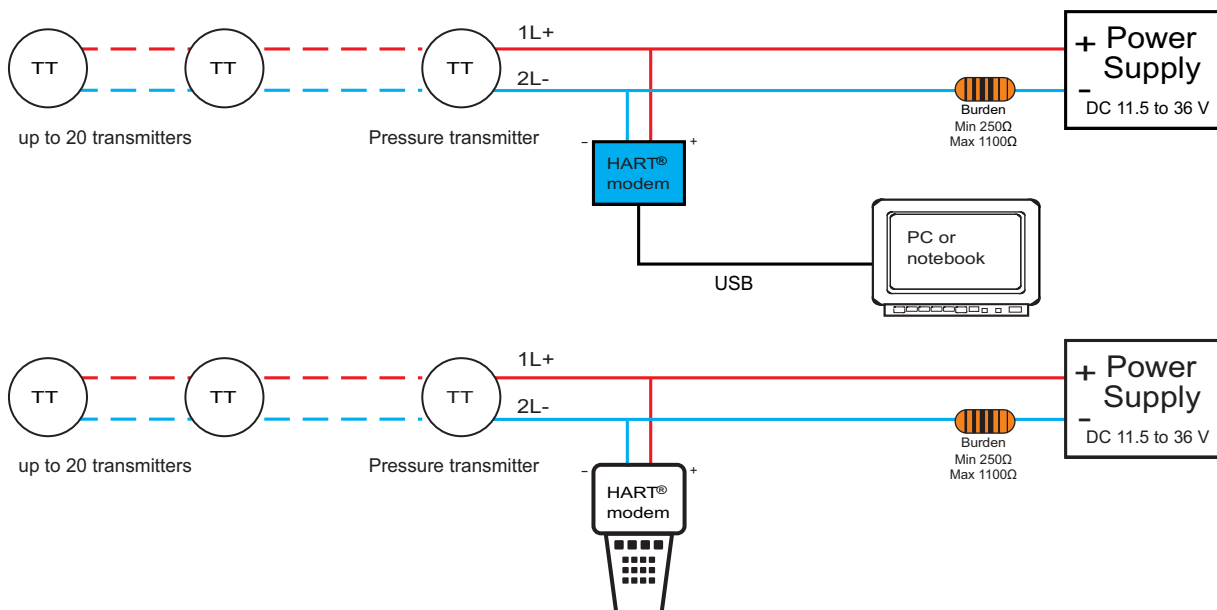
These transmitters can be configured utilizing any of the three following methods: **(1)** locally configuring the instrument (zero, range, shift, characteristics and damping ratio) by means of pushbuttons on the transmitter, **(2)** by a PC with a dedicated interface and the MADECO smart configuration software ; **(3)** with having the capability of digital communication, they may be configured using MADECO hand-held terminal with HART protocol or other hand-held communicators\*. The data interchange with the transmitter enables the user to identify the transmitter, calibrate the sensor, read the immediate measured value of the input and the current output of the transmitter. User may alter the measurement unit and the range, introduce zero elevation, apply measurement inversion, take a square root or squar the value of the measurement and set the damping time. Additionally the operator may force an output current with a set value.

In the version “with Ex protection Ex II 1/2 G Ex ia IIC T6 Ga/Gb, the transmitter can be mounted within the hazardous area Zone 1, for connect ion to Zone 0.



## MDTT Industrial Smart Temperature Transmitter

ORDERING CODE	Example:	MDTT	P	1	S	2	AT	H	N	2	N	W3	Note
Input Sensor													
P - PT100			P										
T - Thermocouple													
M - millivolt													
Measurement Configuration													
1 - Single - sensor input				1									
2 - Dual - sensor input													
Housing material													
A - Aluminum													
S - Stainless Steel					S								
C - Customer													
Conduit Entry Size													
2 - 1/2NPT						2							
4 - M20*1.5													
C - Customer													
Accuracy													
AT - 0.075% (std.)							AT						
AC - 0.04%													
AS - 0.02%													
Transmitter Output													
H - 4...20mA signal based on HART® protocol								H					
F - Foundation™ fieldbus protocol													
P - PROFIBUS® PA Protocol													
L - Low power 1...5 VDC													
W - Wireless													
Certificate													
N - None									N				
I - Intrinsically safe (II 1/2 Ex ia IIC T4/T5)													
E - Explosion proof (II 1/2 Exia/d IIC T5/T6)													
M - Marine certificate-DNV													
Immersion Length													
XXX Please specify in mm										2			
Display													
N - None											N		
D - LCD display													
Options													
BR - Bracket for 2-in.pipe or panel mounting. sst													
CC - Calibration certificate													
CM - Material Traceability certification													
CP - Hydrostatic testing with certificate													
CL - Cleaning for special service													
CR - special calibration range (please specify the range)													
AN - Analog zero and spam trim													
NH - Stainless steel tag wired to case													
AT - ATEX													
W3 - 3 year warranty												W3	
W5 - 5 year warranty													
Other													





Address: 7191 Yonge street, Toronto, Canada

Tel: +16472221281(5 line)

Web: [www.madecotech.com](http://www.madecotech.com)

Email: [Info@madecotech.com](mailto:Info@madecotech.com)