

- ❖ Compatible with MODBUS-RTU RS485
- ❖ Working temperature from -40°C to $+80^{\circ}\text{C}$
- ❖ Relative humidity 0-100% RH
- ❖ Accuracy of $\pm 0.3^{\circ}\text{C}$ / 3% RH (25°C)

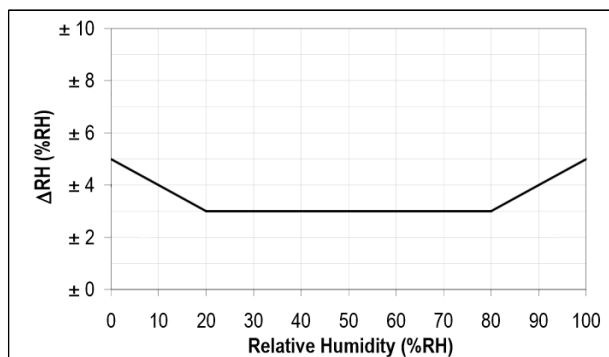
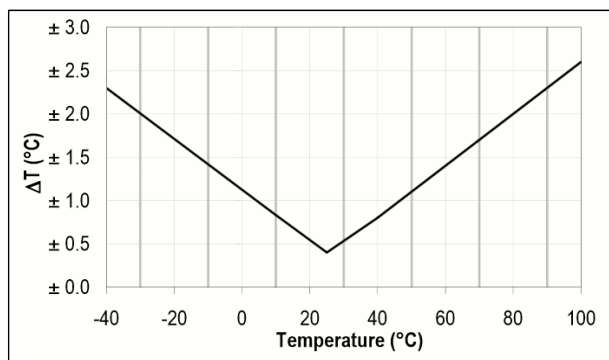


PRODUCT NAME	CODE	SUPPLY
IPSEN-TH2-MOD	5-202-283	12 VDC

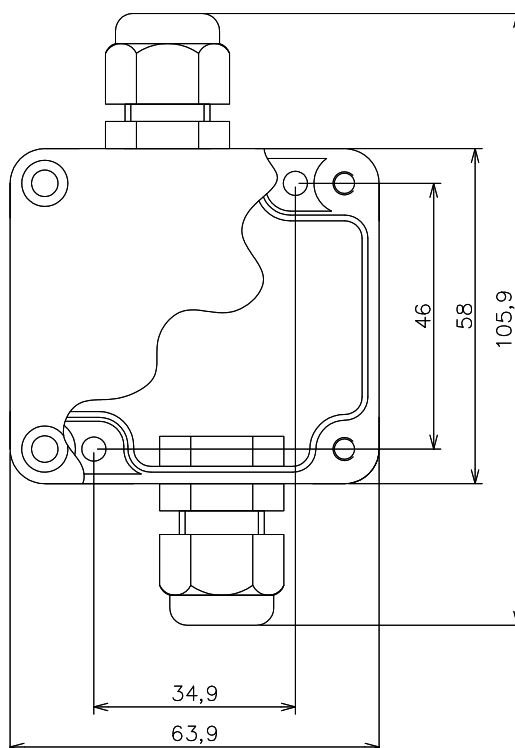
Technical Parameters

Parameter	Value	Unit	Note
RS485 MODBUS	Quantity	1	
	Speed	Max. 115.2	kbps Default
	Overvoltage Protections	30	A 8/20 μs
Supply	Input	10 - 16	VDC
	Consumption	max. 0.5	W
Accuracy	Temperature	$\pm 0,3$	$^{\circ}\text{C}$ at 25°C
	Humidity	± 3	% at 25°C
Environment	Operational Range	$-40\dots+80$	$^{\circ}\text{C}$ Temp. of Environment
	Degree of Coverage	IP52	
Parameters	Weight	0.12	kg
Certification	Standard CE		
The producer retains the right to change any technical parameters without previous written or published notification.			

Accuracy



Dimensions



1. Mounting

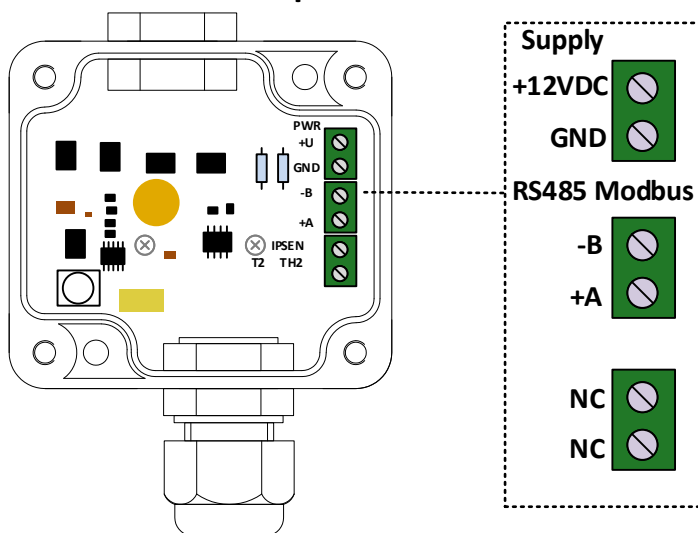
Mount the sensor to a flat surface. All the necessary screws are included.

2. Connect supply

Unscrew the upper board. According to the pictures below, connect the power supply 12 VDC. Connection of the power supply is indicated by LED PWR switching on.

3. Connect RS485 MODBUS

According to the pictures below, connect the communication RS485 Modbus. Screw the upper board back on.

IPSEN-TH2-MOD - ports

REV:
 201404 – Default
 201606 – Added IPSEN-T2/TH2
 201904 – Modification only with Modbus

Default Settings of Communication

Device ID: 1 | Baudrate: 115 200 | Parity: None | Data bits: 8 | Stop bits: 1

Modbus Registers

Subject		Type	R/W	Value	Offset	
Device	FW Version Major	u16	R		1010	
	FW Version Minor	u16	R		1011	
	FW Version - Revision	u32	R		1012-13	
	Reset	u16	RW	55203 = To Reboot	1201	
	Board Power Voltage	u16	R	105 = 10,5V	1311	
BUS Settings	Baudrate	u16	RW	192 = 19.2 kbps 1152 = 115.2 kbps	2110	
	Databits	u16	RW	8 = 8b, 9 = 9b	2111	
	Parity	u16	RW	78 = None 69 = Even 79 = Odd	2112	
	Stopbits	u16	RW	10=1, 20=2, 15=1,5	2113	
	MODBUS address	u16	RW	1 - 247	2120	
Subject		Channel	Type	R/W	Value	Offset
Measured and Correction	Temperature	AI#01	s16	R	100 = 10 °C	5001
	Humidity	AI#02	s16	R	500 = 50 %	5002
	Temperature Correction	AI#01	s16	RW	100 = 10 °C	5101
	Humidity Correction	AI#02	s16	RW	500 = 50 %	5102