- Compatible with MODBUS-RTU RS485
- 1x Programmable Relay
- 1x Input for Connection for the Sensing Cable / Sensors
- 1x Ouput +5VDC / 300mA
- 1x Supply Input 10-30VAC, 10-60VDC
- Operating Range –40°C to +70°C
- Operating Range of Components –40°C to +85°C

Evaluation Unit

Detection Sensor

Sensing Cable (max. 75m)

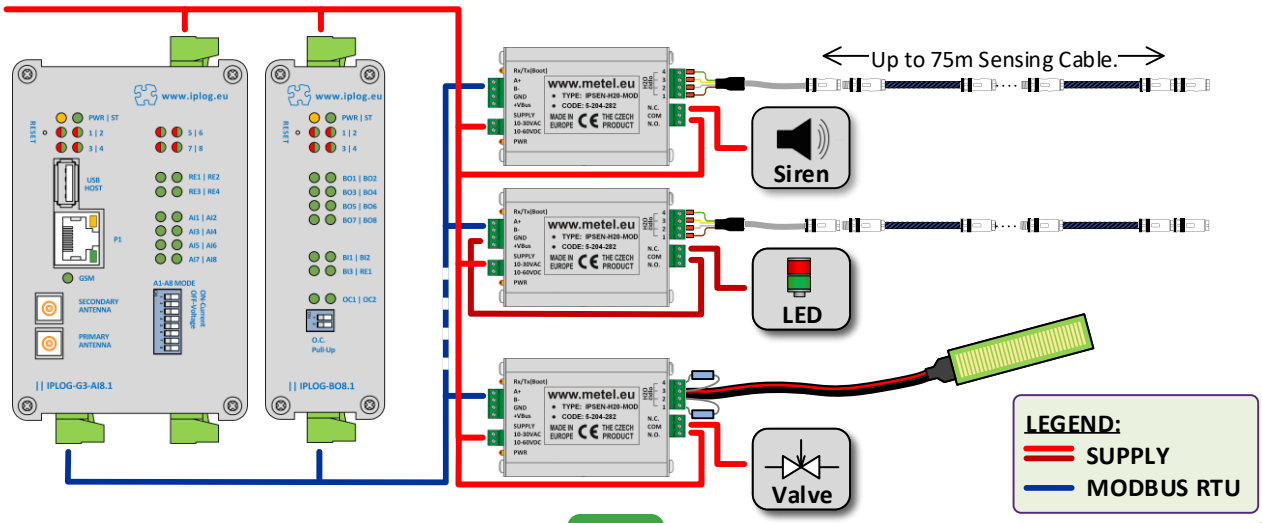
PRODUCT NAME	CODE	NOTE
IPSEN-H2O-MOD	5-204-282	10-60VDC/10-30VAC
Accessories		
MSC-750	5-204-283	Sensing Cable 7,5m
H2O-KIT	5-204-281	Resistor + Connection Cable
H2O-PCB-78H	5-204-284	Detection Sensor
Holder for Mounting to DIN35 and Flat Surface is Included.		

Technical Parameters

	ParameteR	Value	Unit	Note
MODBUS-RTU (RS485)	Count	1		Max. 30x on the Bus
	Speed	Max. 115.2	kbps	Default Settings
	Overvoltage Protection	30	A	8/20us
Relay Output	Type of contact	1x Change-over		
	Max. Load	62.5VA (30W) / 1A / 60V		Resistive Load
Power Supply	Input	10 – 60 / 10 – 30	VDC/VAC	
	Power Consumption	Max. 0.5	W	
	Output	5	VDC	Max. 300mA
Environment	Operational Range	–40...+70	°C	Temperature of Environment
Mechanical	Weight	0.11	kg	
Certification	Standard CE			
The producer retains the right to change any technical parameters without previous written or published notification.				

Typical Connection with PLC-IPLOG-GAMA and Visualization

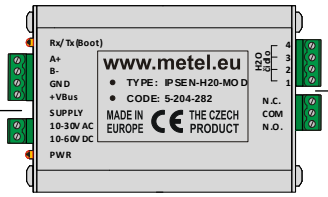
H2O detectors are connected to control units via RS485 with MODBUS-RTU protocol. Up to 30 H2O detectors, IO modules and other sensors supporting the MODBUS-RTU protocol can be connected to it.



Connection with Sensing Cables MSC-750

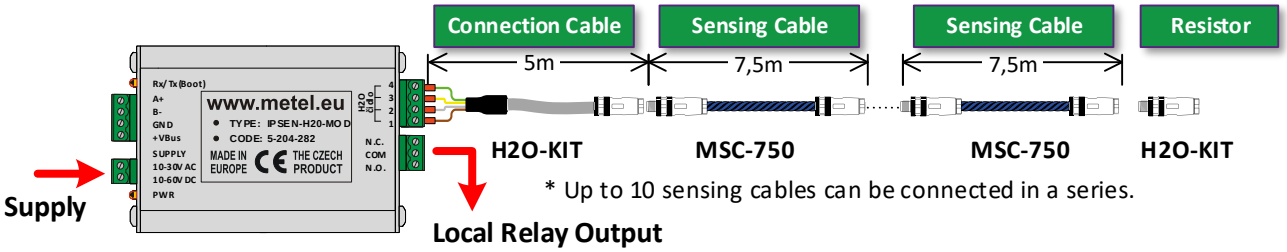
Connect the RS485 communication bus with the MODBUS-RTU protocol to terminals A+ and B-. +Vbus terminal is 5VDC / 300mA output for powering accessories.

Connect an external 10-30VAC or 10-60VDC power supply to this terminal block.



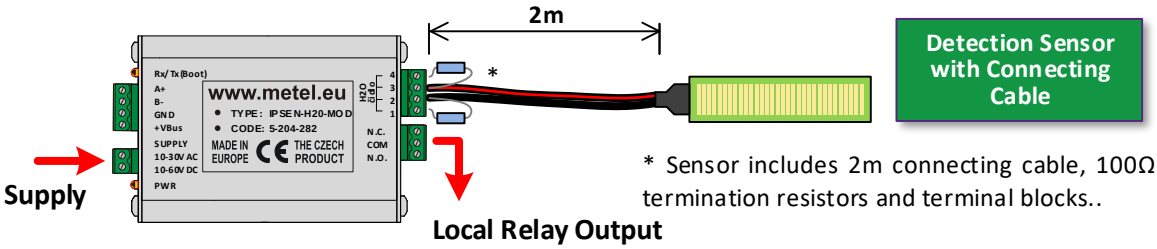
Terminal for connecting of water sensing cable.
1 - BROWN 3 - YELLOW
2 - WHITE 4 - GREEN

Relay output controlled by MODBUS-RTU protocol from PLC IPLOG-GAMA



* Up to 10 sensing cables can be connected in a series.

Connection with Detection Sensor H2O-PCB-78H



* Sensor includes 2m connecting cable, 100Ω termination resistors and terminal blocks..

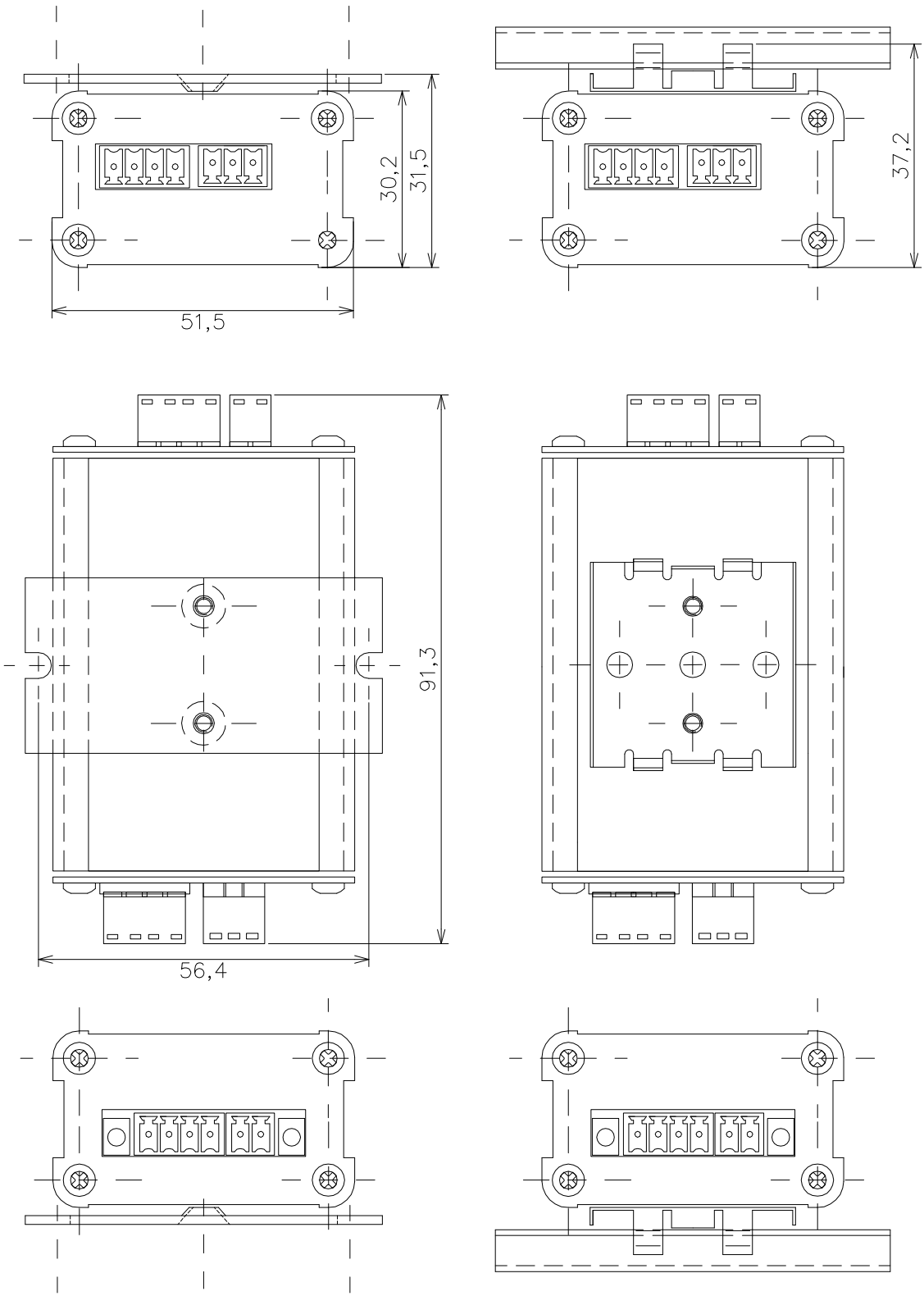
Default Settings of Communication

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

Modbus registry

	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
	Restart		u16	RW	55203 = Reboot	1201
	Board Voltage		u16	R	105 = 10,5V	1311
Bus Settings	Baudrate		u16	RW	192 = 19.2 kbps 1152 = 115.2 kpbs	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**
Measure-ment and States	Flood Measurement	AI#01	u16	R	0 = 0%, 100 = 100%	5001
	Dry	DI#01	bit	R	1 = Dry	3001
	Moist	DI#02	bit	R	1 = Moist	3002
	Wet	DI#03	bit	R	1 = Wet	3003
	Cable Fault	DI#04	bit	R	1 = Fault Cable	3004
	Change	DI#05	bit	R	1 = Change	3005
	Need Calibration	DI#06	bit	R	1 = Need Calibration	3006
	Calibration	DI#07	bit	R	1 = Calibration	3007
Relay Out	Relay Output 1	DO#01	bit	RW	0 = OFF, 1 = ON	4001

Dimensions IPSEN-H2O-MOD



REV: 201406 – Start of Production
201608 – Added H2O-PCB-78H Detection Sensor
201906 – Modbus Modification