

IP65 Modbus Light, Temperature, Humidity Sensor connected to HMI

Characteristics:

12-24 VDC

Slave Modbus RTU RS485

Temperature range -30 +80°C (+/- 5 % at 20°C)

Light range 0-65535 Lux +/- 7%

Humidity range 0-100% +/- 3%

IP65 Light, Temperature, Humidity Sensor

Size Plastic case: 90 x 58 x 35 mm

Dimensions: L 90 x H (58 + 41) x P (36 + 8) mm



RS485 and power supply wiring

Sensor Wire Colour	Sensor Description	Sub-D9 HMI RS485
Red	Power + 12-24 VDC	
Green	Power – GND	
Yellow	RS485 A+	Pin 9
Blue	RS485 B-	Pin 8

RS485 communication parameters

Default 9600 bds, 8 bits, none, 1 stop



Registers for reading light/brightness, temperature and humidity data:

ACE-THL-MB Version 1

Modbus Register If start from 0	Modbus Register If start from 1 (*)	Description	Data type	
4×0	4×1	Luminosity/Light (Lux)	Read only 16 bits unsigned	0 to 65535
4×1	4×2	Temperature (°C *100)	Read only 16 bits signed	-4000 to +12300
4×2	4×3	Humidity (% *100)	Read only 16 bits unsigned	0 to 10000
4×102	4×103	Modbus Slave ID / Device address	Read / Write 16 bits signed	Default 1
4×103	4×104	Baud rate (1=2400,2=4800,3=9600)	Read / Write 16 bits signed	Default 3 = 9600 bds

