MBUS_WTH_CO2_LCD_ETH: Wall mount Temp/Hum/CO2 sensor w/ LCD, RS485, & Ethernet
MBUS_DTH_CO2_LCD_ETH: Duct mount Temp/Hum/CO2 sensor w/ LCD, RS485, & Ethernet

Features:

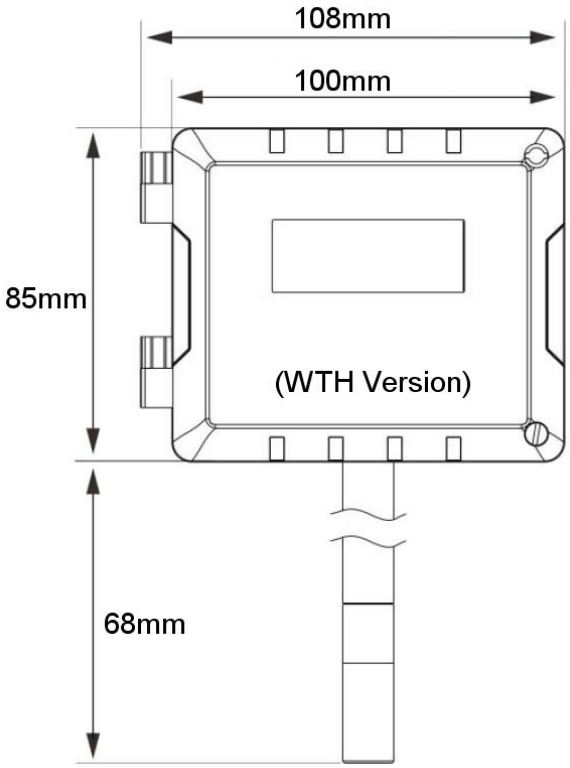
- CO2, Temperature, and Humidity readings from a single sensor
- RS485 Network Communication via Modbus RTU
- TCP/IP Network Communication via ModbusTCP
- Transducer outputs are jumper selectable for 4-20mA, 0-5V, or 0-10V
- Back-lit LCD Display

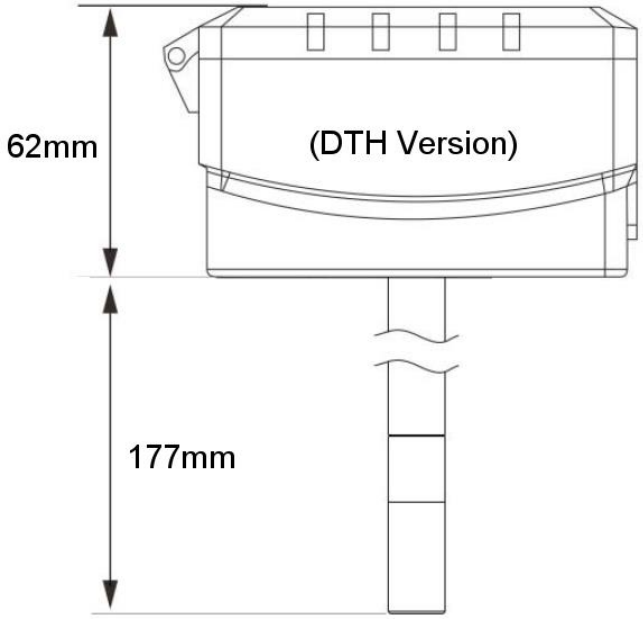
Supply voltage	15~24VAC +/- 10%, 50-60Hz: 15-24VDC +/- 10%
Power consumption	2 watt typical
Operation	5-50°C (40-122°F)
Ambient humidity range	0-95%Rh non condensing
Humidity Accuracy	+/- 5%RH @ 25C from 20-80%RH.
Temperature	10K thermistor (± 0.5C Accuracy @ 25C)
CO2 sensor	Dual Beam NDIR: +/-5%. Drift <50ppm/yr
Material, Enclosure	IP65, Flammability rating UL 94V0, file E194560, plastic is halogen free
Weight	200g

DTH Version

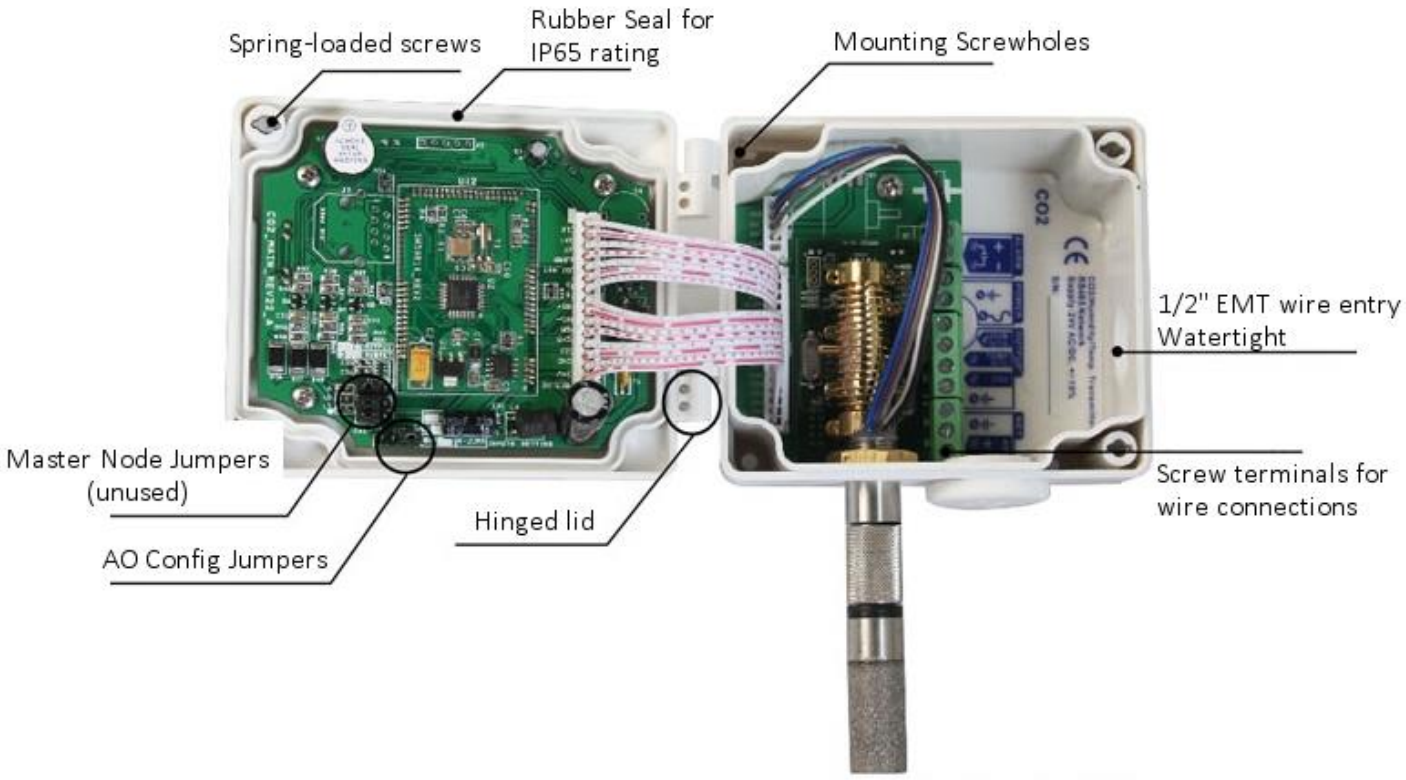
WTH Version

Dimensions:

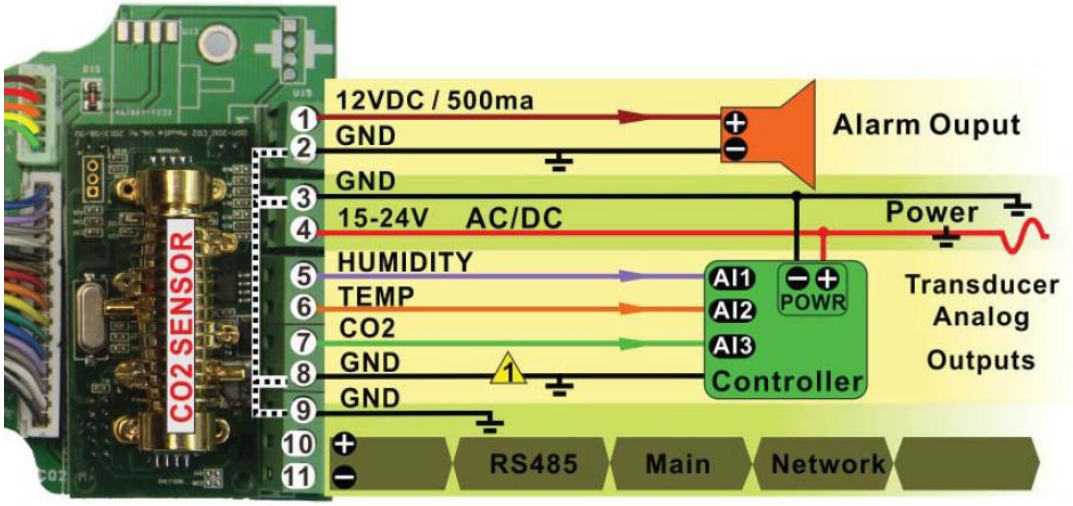




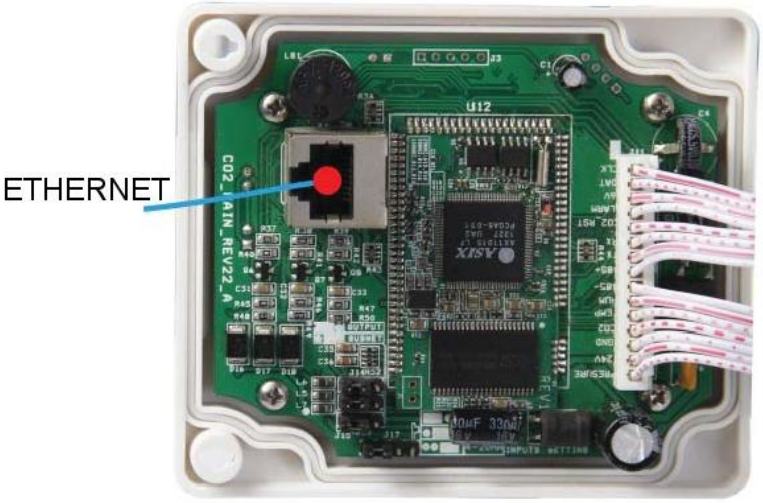
Inside view:



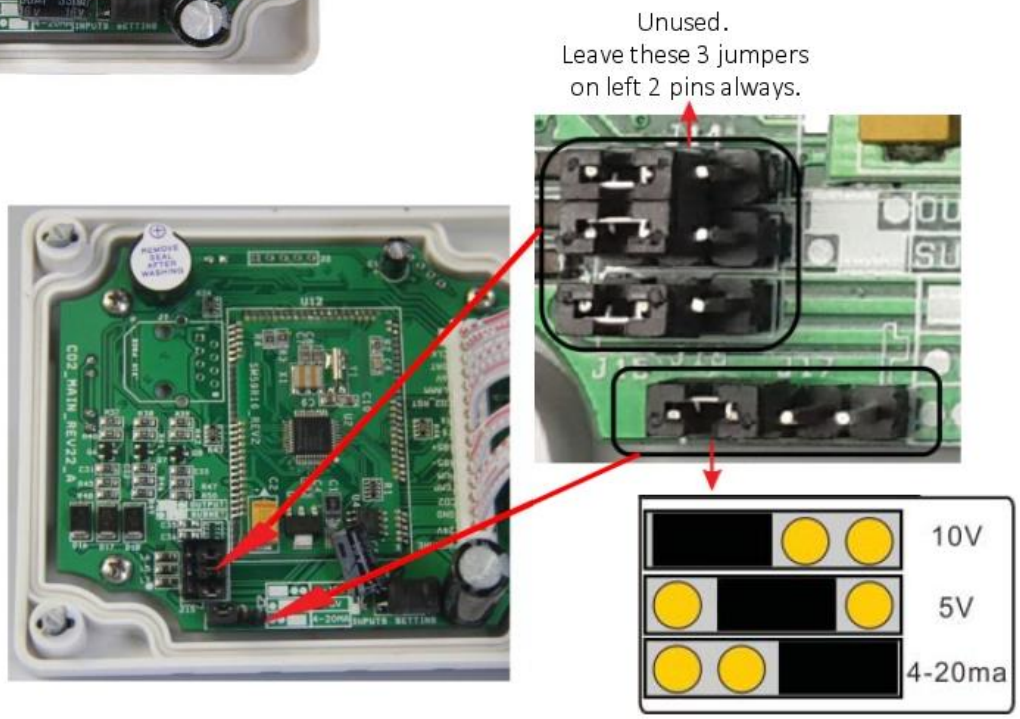
Wiring Diagram:



Ethernet Version:



Analog Output Jumpers:



MODBUS Registers. Communication defaults: RS485 at 19200, 8, None, 1

REG	BYTES	RANGE	DEFAULT	DESCRIPTION
6	1	0-255	254	Modbus device address
12	1	0-1	1	Baudrate: 0=9600, 1=19200
100-105	6	0-255	- -	MAC address (read only)
106	1	0-1	1	IP Mode: 0=Static, 1=DHCP
107-108	2	0-255	- -	Upper 2 bytes of IP Address
109-110	2	0-255	- -	Lower 2 bytes of IP Address
111-112	2	0-255	- -	Upper 2 bytes of Subnet Mask
113-114	2	0-255	- -	Lower 2 bytes of Subnet Mask
115-116	2	0-255	- -	Upper 2 bytes of Gateway IP
117-118	2	0-255	- -	Lower 2 bytes of Gateway IP
201	1	0-1	1	LCD Units to display: 0=DegC, 1=DegF
202	2	0-1000	- -	Internal temp sensor value in DegC x 10
203	2	0-1000	- -	Internal temp sensor value in DegF x 10
204	**2**	**0-1000**	**- -**	**External temp sensor value in DegC x 10**
205	**2**	**0-1000**	**- -**	**External temp sensor value in DegF x 10**
207	**2**	**0-1000**	**- -**	**Humidity sensor value in %RH x 10**
211	**2**	**0-2000**	**- -**	**CO2 sensor value in ppm**
212	2	-1000 to +1000	0	CO2 calibration offset
213	2	0-2000	800	Setpoint value for CO2 pre-alarm
214	2	0-2000	1200	Setpoint value for CO2 continuous alarm
1238	1	0-99	20	RTC: Century setting
1239	1	0-99	16	RTC: Year setting
1240	1	0-12	- -	RTC: Month setting
1241	1	0-31	- -	RTC: Day of month setting
1243	1	0-23	- -	RTC: Hour of day setting
1244	1	0-59	- -	RTC: Minute of day setting
1245	1	0-59	- -	RTC: Second of day setting
1246	1	0-255	0	Alarm control: 0=auto, 128=off, 129=force pre-alarm, 130=force continuous alarm
1247	1	0-20	2	Alarm sound ON time in seconds for pre-alarm.
1248	1	0-20	2	Alarm sound OFF time in seconds for pre-alarm.
1250	1	0-7	0	Analog output Auto/Manual control. 0=auto, 1=Manual Bit0:tempAO, bit1:humAO, bit2:co2AO
1251	2	0-1000	500	Manual value for tempAO if bit0 is set to 1 in reg1250
1252	2	0-1000	500	Manual value for humAO if bit1 is set to 1 in reg1250
1253	2	0-2000	1500	Manual value for co2AO if bit2 is set to 1 in reg1250
1254	1	1,2,3	1	Analog Output config (set by jumpers - Read only) 1=4-20ma, 2=0-5V, 3=0-10V
1255	2	0-1000	0	AO Scale Low for temperature
1256	2	0-1000	1000	AO Scale High for temperature
1257	2	0-1000	0	AO Scale Low for Humidity
1258	2	0-1000	1000	AO Scale High for Humidity
1259	2	0-1000	0	AO Scale Low for CO2
1260	2	0-2000	2000	AO Scale High for CO2