

# QER10 - MER10 - VER10 - TER10

## SMART AIR QUALITY (CO2, TVOC), TEMPERATURE AND HUMIDITY SENSORS

SMART ROOM SENSORS



Bluetooth



The xER10 (QER10/MER10/VER10/TER10) Series Smart Multi-Sensors have been designed for monitoring and control CO<sub>2</sub>, VOC, Temperature, Humidity and Occupancy in room spaces. The xER10 series sensors are wall surface mounted. The sensors can have an optional colour display with high hardness glass front, and/or additional PIR sensor. Touchscreen option is available for network user interface functions and interactive sensor operations such as trending. Sensors have also integrated control loops, and can be used as network input/output module. Optional Bluetooth wireless interface provides Smart Phone App interface (iOS). LoraWan option allows integration wirelessly to the LoraWan systems. Programmed over serial cable or Bluetooth using PC or iOS Tools.

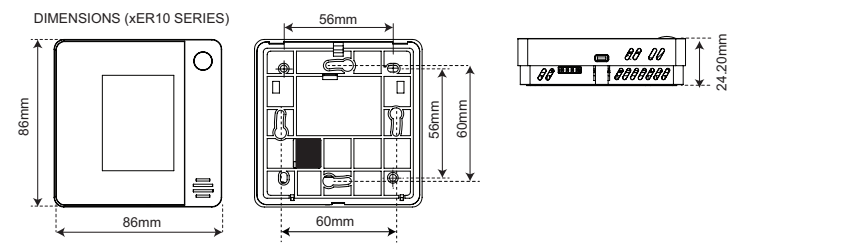
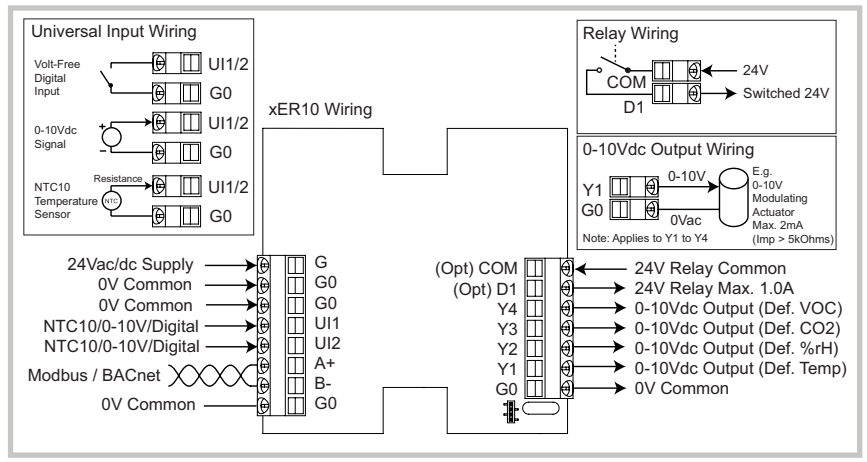


INTELLIGENT ROOM CONTROL SOLUTIONS

Technical Details Summary	
Power:	24Vac/dc, max 80mA with Touchscreen
CO <sub>2</sub> :	Range: 0..5,000ppm Accuracy: ±30ppm ±3.0% m.v.
Temperature:	Range: 0..50° (32..122°F) Accuracy: ±0.5°C (typical accuracy +/-0.3°C, 18-24°C)
VOC/TVOC:	Volatile Organic Compound/Total Volatile Organic Compound Range: Air Quality Index : 0..500 TVOC Ethanol: 17..4491 ug/m <sup>3</sup> / 9..2383 ppb TVOC Molhave (WELL Building Standard®): 23..6621 ug/m <sup>3</sup> / 5..1326 ppb TVOC Isobutylene (RESET® Standard): 21..5482 ug/m <sup>3</sup> / 9..2389 ppb Device to Device Variation: ±10 index points
Humidity:	Range: 0..100%rH Accuracy: ±2%rH (within 20 to 80%rH)
PIR:	Occupancy Detection, Range: 5m
Inputs:	2 x Universal Inputs, NTC10, 0-10V, Digital
Outputs:	4 x Analogue 0-10Vdc Outputs, max 2mA 1 x Optional 24V Pilot Relay, max 1.0A res.
Wired Network:	Modbus RS485 or BACnet MS/TP, with 60V Fault Tolerance, 1/10 Unit Load Address Setup via Bitswitch, Display or Tool
Wireless:	Bluetooth Interface to SmartPhone App or BLE USB Dongle (PC Device Config Tool) LoraWan® Wireless Interface (EU868, US915, AS923)
Display:	Full Colour 2.4" LCD, 240x320px Cover Glass Hardened ≥6H
Touch:	Capacitive Touchscreen
Terminals:	Rising Cage Screw Terminals, 0.2 to 2.5mm <sup>2</sup> / 26 to 12 AWG
Enclosure:	ABS ULV0 Plastics - White or Black, IP30
Dimensions:	W86 x H86 x D24mm
Origin:	United Kingdom

Part Number		SKU# Number	
<b>Product Name</b>		<b>Code</b>	<b>Product Options</b>
QER10	Room CO <sub>2</sub> and Temperature Multi-Sensor, 2UI, 4AO, 24Vac/dc Supply	1000	
MER10	Room Humidity and Temperature Multi-Sensor, 2UI, 4AO, 24Vac/dc Supply, 2% Acc	1100	
TER10	Smart Room Temperature Sensor, 2UI, 4AO, 24Vac/dc Supply	1200	
VER10	Room VOC, Humidity and Temperature Multi-Sensor, 2UI, 4AO, 24Vac/dc Supply	1300	
<b>Communications Options</b>			
MOD	Modbus RS485, Up to 60V Protection	1	
BAC	BACnet MS/TP, Up to 60V Protection	2	
<b>Interface Options</b>			
	No Interface		00
LCD	Colour Display		01
TS	Colour Capacitive Touchscreen		02
BLE	Bluetooth App Interface		03
LCD-BLE	Colour Display and Bluetooth		04
TS-BLE	Touchscreen and Bluetooth		05
LRA	LoraWan Wireless Interface, EU868Mh		06
LCD-LRA	Colour Display and LoraWan Interface, EU868		07
TS-LRA	LoraWan Wireless Interface EU868 with Touchscreen		08
<b>Measurement Options</b>			
	No Extra Measurements		00
RH	Relative Humidity (QER Only)		01
RH-VOC	Volatile Organic Compound and Humidity (QER Only)		02
OE	Passive Infrared Sensor (PIR)		03
RH-OE	Relative Humidity and PIR (QER Only)		04
RH-VOC-OE	VOC, Relative Humidity and PIR (QER Only)		05
<b>Output Options</b>			
	No Output Options		00
RL	24V Relay Output		01
<b>Colour Options</b>			
B	Black		01
W	White		02

Order Example: QER10-MOD-TS-OE-W, SKU# 1000 102 03 00 02



TOOLS