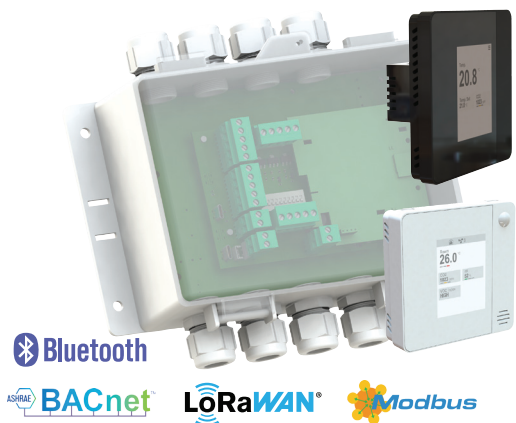


# TCR81 - TCR82

CEILING MOUNTED CONTROLLERS, UP TO 2 TOUCH INTERFACES, 24V/230V



The TCR80 Series Controllers are ceiling mounted room controllers for controlling up to two rooms. The controllers have IP65 rated enclosure with cable glands and are available with 24V or 230V power supply. The controllers can be connected to up to two TDR20/QDR20 display panels using the USB-C cables (or via 4-wires), making installation and connection simple. The built-in universal inputs can be used with cable sensors. The room interface panels have temperature measurement, setpoint, fan speed, boost function and operating mode selection (configurable). In addition the room interface panels can have optional humidity, VOC, CO2 and occupancy measurements. The controllers have built-in Modbus RTU or BACnet MS/TP communication that allow interaction to the BMS systems, or Wireless LoraWan. The controllers can be configured using Windows Configuration Tool over the USB-SERIAL or wireless Bluetooth BLE-TOOLSET. The controllers can also be configured over the Modbus/BACnet, or using iOS Mobile Phone/iPad application.



Technical Details Summary	
Power:	24V Models: 24Vac/dc -10%/+15%, 230V Models: 230Vac
Inputs:	TCR81: 2 x Universal Inputs - RI/AI/DI Selection TCR82: 4 x Universal Inputs - RI/AI/DI Selection RI = NTC10 Measurement RI = Resistive kOhms Measurement, 0.1..500kOhms, Accuracy: 0.1+/-2% kOhms of the reading (1..80kOhms), resolution 0.1 kOhms AI = 0..10Vdc Input, display resolution 0.1 Volts DI = Digital Volt-Free Input
Analogue Outputs:	4 x Analogue 0-10Vdc Outputs, max 2mA
Digital Outputs:	TCR81: 2 x 24Vac Rated Triacs, Switching to 0V, Max 1A load TCR82: 4 x 24Vac Rated Triacs, Switching to 0V, Max 1A load
Wired Comms:	Modbus RS485 or BACnet MS/TP, with 60V Fault Tolerance, 1/10 Unit Load
Wireless:	Bluetooth Interface to SmartPhone App or BLE USB Dongle LoraWan® Wireless Interface (EU868, US915, AS923)
Sensor Bus:	2 x USB-C Connectors for the Room Interface Panels (TDR/QDR20) Each connector provides RS485, 0V and 5Vdc Option: 5V, 0V, TX, RX Spring Loaded Terminals Block
Terminals:	Spring Loaded Push Fit Terminals, 0.2 to 2.5mm2 / 26..12 AWG, 4 x M16 and 4 x M20 Cable Glands
Enclosure:	ABS Plastics - White, IP65 Rating
Dimensions:	W220 x H140 x D75mm
Origin:	United Kingdom

Part Number	SKU# Number
<b>Product Name</b>	<b>Code</b> <b>Product Options</b>
TCR81 Ceiling Mounted Room Controller, 2UI, 4AO, 2DO, 2 x Room Interface Unit Support	8100
TCR82 Ceiling Mounted Room Controller, 4UI, 4AO, 4DO, 2 x Room Interface Unit Support	8200
<b>Communications Options</b>	
No Wired Communication (select for LoraWan)	0
MOD Modbus RS485, Up to 60V Protection	1
BAC BACnet MS/TP, Up to 60V Protection	2
<b>Wireless Communication Options</b>	
No Interface	00
BLE Bluetooth App Interface	03
LRA LoraWan Wireless Interface, EU868Mhz	06
BLE-LRA LoraWan Wirelss Interface EU868 with Touch-screen	09
<b>Wiring Terminal Options</b>	
USB-C Connector for Zone Sensors	60
5V+ Zone Sensor Communications with Screw Wiring Terminals for Zone Sensors	61
E Optional Extra Wiring Terminals (for looping)*	62
5VE Screw Wiring Terminals for Zone Sensors + Optional Extra Wiring Terminals (for looping)*	63
<b>Power Supply Option</b>	
24 24V Power Supply	10
230 Passive Infrared Sensor (PIR)	11
<b>Region Options (LoraWan)</b>	
Non Lora & EU868MHz LoraWan (Default)	0
US US915MHz LoraWan	1
AS AS923MHz LoraWan	2
<b>Colour</b>	
W White	2

Order Example: TCR81-LRA-5V-230-W, SKU# 8100 0 06 61 11 02  
Note (\*): Only available with 24 models (24V power supply models)

Accessories	SKU# Number
USB-C- 6m USB-C Male to USB-C Male for Room Interface Units, Black	8510 0 00 0005 01
USB-C- 5m USB-C Female to USB-C Male Extension Cable, Black	8520 0 00 0006 01

