

- 3.5" resistive color touch-screen
- Freely programmable
- Fully customizable graphics
- Powered by Sedona Framework
- Integrated temperature sensor
- Optional relative humidity sensor
- Multiple communication ports
- WIFI option
- Belimo MP-Bus option
- Dali (Digital Addressable Lighting Interface) option
- DMX driver available
- Low profile, only 10.5 mm thick
- Optional Input/output modules optimized for terminal units

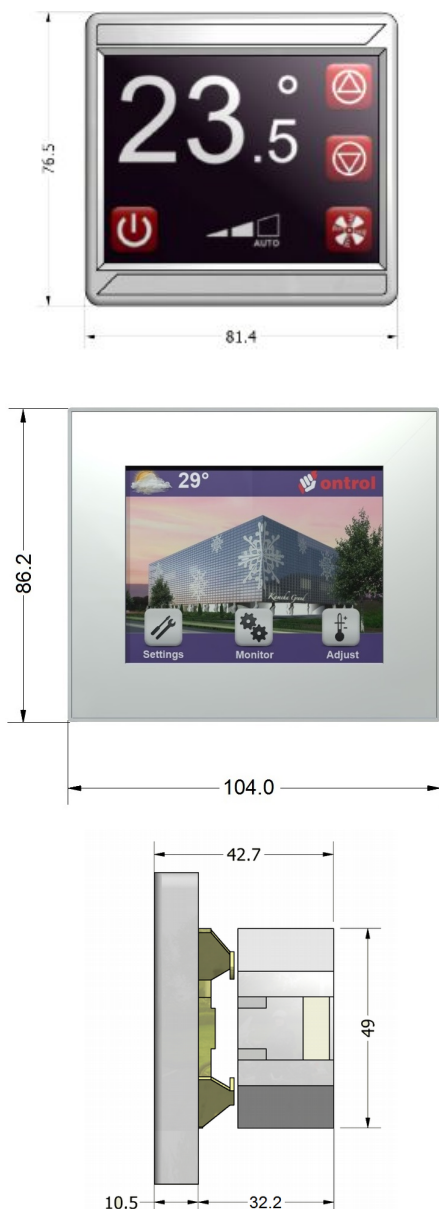
FRAME STYLE 1



FRAME STYLE 2



Dimensions (mm)



Specifications

Operating voltage and power consumption	24 Vac/dc 2,5 VA
Mounting	Flush wall mount using - standard round electrical box, 60 mm axles distance, min. 45(40)mm depth (both frame styles) - standard UK style box 86x86 mm (frame style 2 only) Surface mount backbox option
Display	3.5" Resistive touch-screen 320x240 pixel resolution 65K colors
Operating Temperature	5..50 °C
Storage Temperature	-25..+75 °C
Relative Humidity	%5...95 rh, non-condensing
Weight	165 gr (225 gr with packaging)
Protection	IP30 according to EN 60529
Connections	Screw terminals, max 1 mm ² (26-16 AWG)
Communication Ports (depending on version)	Port 1: Main RS485 (BacNET Slave, Modbus RTU master or slave) or WIFI Port 2 : Auxiliary RS485 (Modbus RTU master) Port 3: DALI (Master) Port 4: Belimo MP-Bus (Master)
Wireless	IEEE 802.11b WIFI
Programming Port	Standard Micro USB cable

Versions

Two parts need to be ordered to make-up a R-ION:

RS or RH... Display
B... Base

Replace last 'x' in part number with color code:

W: White B: Black

		ports				sensor		Frame Style 1	Frame Style 2	
		1	2	3	4	Temperature	Humidity			
DISPLAY PART	Serial Versions	Wi-Fi	RS485	RS485 / MU	Dall	MP-Bus	Temperature	Humidity		
		✓	✓	✓	✓	✓	✓	✓	RS-S-D-x	RS2-S-D-x
		✓	✓	✓	✓	✓	✓	✓	RH-S-D-x	RH2-S-D-x
		✓	✓	✓	✓	✓	✓	✓	RS-S-DB-x	RS2-S-DB-x
	WiFi Versions	✓	✓	✓	✓	✓	✓	✓	RH-S-DB-x	RH2-S-DB-x
		✓	✓	✓	✓	✓	✓	✓	RS-W-D-x	RS2-W-D-x
		✓	✓	✓	✓	✓	✓	✓	RH-W-D-x	RH2-W-D-x
		✓	✓	✓	✓	✓	✓	✓	RS-W-DB-x	RS2-W-DB-x
BASE	In-wall (flush) mounting base (compatible with serial & WIFI displays)							BF-W	B2F-W	
	In-wall (flush) mounting base (for serial displays only)							BF	B2F	
	Surface mount base (specify color: white or black)							Not available !	B2S-X-x	
Custom color/material/finish front-plate (only for RS2-.. types)								Not available !	ask	

R-ION System Description

Overview

R-ION series products are programmable room controllers ideal for managing a wide range of individual building products such as fan-coil units and VAV boxes.

Extremely flexible customization options are available thanks to configurable color touchscreen, full programmability, custom logo possibility and various style/color options.

The unit has no on-board inputs & outputs, but is able to connect to a multitude of external IO, due to multiple communication ports and protocols. Integrated temperature sensor is standard in all versions. The unit can also be ordered in a temperature plus relative humidity sensing configuration.

In addition to basic fan-speed and temperature settings, lighting controls can easily be integrated, as well as custom application specific functions (e.g. Do Not Disturb / Make Up Room buttons for hotel rooms).

Display / User Interface

3.5" resistive color touch-screen. 65K colors.

The display pages and user interface is freely customizable by a systems integrator. Multiple pages can be configured with various widgets for displaying / modifying values.

Communications

R-ION controllers support various industry standard protocols simultaneously. The main supervisory system communication (Port 1) is serial RS485 or wireless IP depending on basic version:

- WIFI versions support BACnet IP, ModbusTcp (master and/or slave), Sox protocol
- Serial ports support BACnet MSTP (slave) and Modbus RTU (master and/or slave)

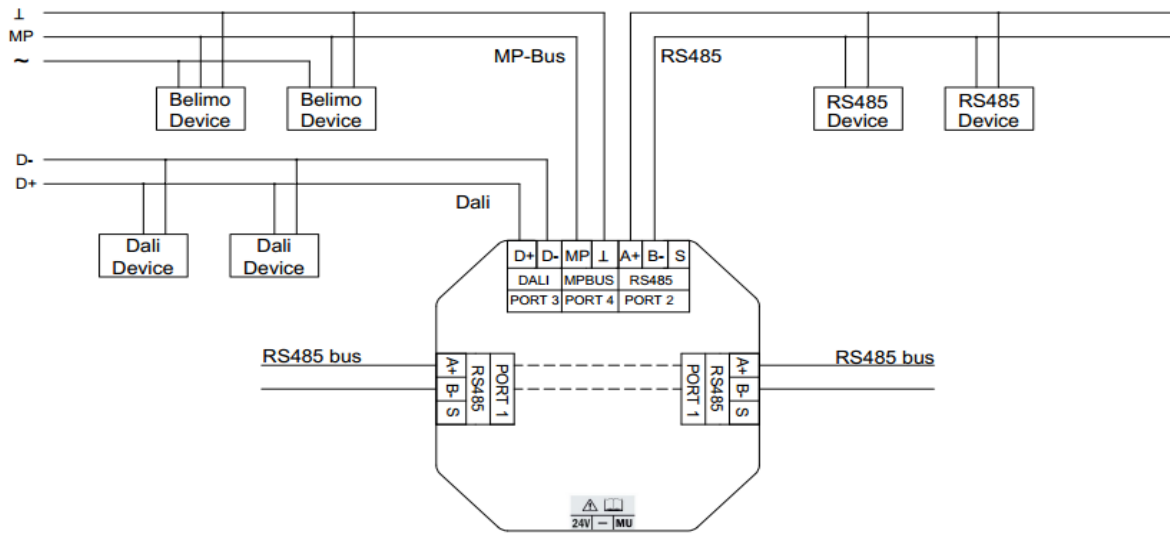
Optionally, one or more of the following auxilliary communication ports may be available:

- Second RS485 port (Modbus & DMX drivers available)
- Belimo MP-Bus port
- DALI (Digital Addressable Lighting Interface) port

Powered by SEDONA Framework

The Sedona Framework™ provides a complete software platform for developing, deploying, integrating, and managing pervasive device applications at the lowest level. It brings the power of programmable control and the Internet down to extremely inexpensive devices. The Sedona Framework distributes decision making control and manageability to any device and brings intelligence and connectivity to the network edge and back.

Connection Diagram



Power Supply Options

