

- 4.3" capacitive color touch-screen
- Edge to edge glass facia
- Fully customizable graphics
- Freely programmable
- Powered by Sedona Framework
- Integrated temperature and humidity sensor, CO₂ option (in development)
- Multiple communication ports
- Belimo MP-Bus option
- Dali (Digital Addressable Lighting Interface) option
- Real-time control

Dimensions (mm)











Specifications

Operating voltage	24 Vac/dc ±10%
Power consumption (Max)	4 VA
Mounting	Flush wall mount using - standard European round electrical wall box, Ø60 mm, min. 45mm depth - standard UK style wall box 86x86 mm - standard CH style wall box
Display	4.3" Capacitive touch-screen 800 x 480 pixel resolution 65K colors
On-board Temperature Sensor Accuracy (at sensor)	±0.2K @25°C
On-board Humidity Sensor Accuracy (at sensor)	±3%RH between 20-80%RH
Operating Temperature Storage Temperature Relative Humidity	550 °C -25+75 °C %595 rh, non-condensing
Weight	215 gr (280 gr with packaging)
Package dimensions	135 x 100 x 97 mm (LxWxH)
Protection	IP30 according to EN 60529
Terminal Size	For power up to 1.5 mm² / 16 AWG For comms up to 1 mm² / 17 AWG
Communication Ports (depending on version)	Port 1: Main RS485 (BacNET Slave, Modbus RTU master or slave) Port 2 : Auxiliary RS485 (Modbus RTU master) Port 3: DALI (Master) or Belimo MP-Bus (Master)
Programming Port	Standard USB-C type



Ordering Information

Part Number	Onboard Sensor			Communication Port				Power Supply	
	Temperature	Humidity	CO ₂	RS485	Dali	Belimo MP-Bus	KNX	24V ac/dc	Ontrol MU
ORION-TH-RRM	\checkmark	\checkmark		$\checkmark\checkmark$				\checkmark	\checkmark
ORION-TH-RRMD	\checkmark	\checkmark		$\checkmark\checkmark$	\checkmark			\checkmark	\checkmark
ORION-TH-RRMB	\checkmark	\checkmark		$\checkmark\checkmark$		\checkmark		\checkmark	\checkmark

 $\checkmark\checkmark$ Two independently configurable RS485 ports

CO2 and KNX versions in development

ORION System Description

Overview	ORION is an extremely versatile device designed to provide intuitive user interaction and real- time control in diverse applications. With its sleek design and fully customizable user interface, it offers seamless integration into different environments and systems. It offers a blend of flexibility, functionality, and aesthetics, making it a valuable addition to diverse environments. Whether for residential, commercial, or industrial use, its customizable interface, multi-protocol communication capabilities, and easy-to-clean, bezel-less glass front ensure seamless integration, efficient operation, and user safety.
Design	The aesthetic design prioritizes user safety and hygiene with a seamless edge-to-edge glass bezel-less front making it easy to clean and disinfect.
Construction	The two-piece construction allows the base to be mounted on the wall for wiring and preparation, while the display part can be easily snapped on later when the site is ready. This modular design simplifies installation and minimizes the risk of damage during construction.
Fully Configurable User Interface	The user interface can be easily customized to to suit individual requirements, providing a tailored user experience. Elements, such as buttons, menus, and widgets, can be freely added and arranged through a user-friendly graphical programming tool. The device supports different graphical widgets, giving users the option to choose the layout and design that aligns with their aesthetic preferences and usability preferences.
Communications	The ORION is equipped with multiple communication ports supporting various industry standard protocols simultaneously, including BACnet, Modbus, Dali and KNX, and more - enabling seamless integration of a wide range of systems and devices.
Onboard sensors	Built-in sensors for measuring temperature and relative humidity are present across all versions. Additionally, an optional feature for CO ₂ measurement is available. This capability enables users to effectively monitor indoor air quality and activate automated routines to ensure a comfortable and healthy environment.
Real-time control	ORION not only serves as a user interface but also possesses the capability to execute programmed control logic in real-time locally and independently, with no reliance on a higher system. This empowers system integrators to create and implement custom control strategies locally increasing system reliability.
Versatility	ORION offers exceptional versatility by providing control over HVAC systems, lighting, blinds, and more. Its capability to manage a wide range of functions makes it a unique tool for creating a comfortable and efficient environment in office buildings, hospitality, health care institutions, shopping centers, homes and extending to industrial applications.
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.

CO2 and KNX versions in development



Terminal Diagram



Two RS485 version



Two RS485 + DALI version



Two RS485 + Belimo MP-Bus version

Power Supply Connections





