

e-Touch Display Mini

Touch Display with air quality sensors for climate and air renovation control

e-Touch Display Mini is a touch display designed for controlling HVAC systems, lighting, and motorized curtains. It features built-in sensors for measuring Temperature, Humidity, CO₂, and VOCs (Volatile Organic Compounds), depending on the model. This device is particularly suited for managing climate control and air renewal in hotel rooms, offices, hospitals, and schools. Some models include up to 8 buttons, allowing users to combine HVAC control with the management of lighting and motorized curtains.

The device connects to a base called e-Bus Coupling Surface for surface mounting, which is purchased separately. This base is available in two different versions: one with RS-485 communication for connecting to the e-Room Modular controller family and another with the Modbus RTU protocol for integration into a Modbus network, where a Master device handles network communication.

Product description

The device is equipped with various buttons for HVAC control, depending on the selected model, as well as buttons for controlling lighting, curtains, or underfloor heating. When connected to an e-Room Modular controller, it manages HVAC and other systems based on the chosen configuration. When integrated into a Modbus network, it can display environmental parameters, either from its built-in sensors or from external sensors connected to the network, managed by a Master device.

A proximity sensor and light sensor located at the top-right corner detect hand presence up to some centimeters away, automatically turning on the display. The light sensor can also dim the display when the room lights are turned off, minimizing disturbance in dark environments.

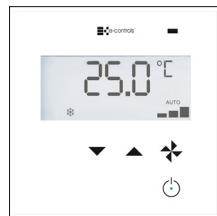
Device configuration

The device includes an NFC interface and an integrated antenna for configuration via the EConfigurator App on Android devices. Configuration can be performed with or without power, simplifying maintenance. If connected to an e-Bus Coupling Surface Modbus, configuration can also be done through the Modbus protocol. Configuration via App: Open the EConfigurator App and select the display and coupling model. Access all configurable parameters based on the chosen model. Adjust the parameters as needed and transfer the configuration via NFC. When configuration is transferred to the device, the On/Off LED indicator blinks in purple color.

Detailed instructions for all parameters are included in the configuration manual.

Instruction sheet

EN



INS1022301XXX01

CE

Product installation

The system consists of three parts, sold separately: The front panel **e-Touch Display Mini**, the mounting frame **e-Bus Coupling Surface** and the **decorative Frame**.

For accurate CO₂ measurements, install one unit per 30 m².

Product assembly process

1. Fix the **e-Bus Coupling Surface** mounting frame to the wall using two screws. Important: Ensure the frame is positioned with the "TOP/ARRIBA DISPLAY" marking facing upwards.
2. Connect the cables to the frame as indicated in the installation diagram.
3. Seal conduit openings to prevent air circulation inside the device.
4. Attach the decorative frame to the coupling using the top and bottom clips. Ensure the frame's vents are aligned at the top and bottom.
5. Insert the **e-Touch Display Mini** into the frame.
6. Remove the protective film from the front panel.
7. Power the device and verify the LED indicator lights up.

Avoid installing on shelves, behind curtains, near heat sources, or in direct sunlight. Ensure vertical air circulation for accurate temperature readings.

Mount at a height of approximately 1.5 meters from the floor.

Precautions

- Ensure the power supply is disconnected before installation or removal.
- Avoid cutting or coiling network cables.
- Do not handle connections with wet hands.
- Do not open or pierce the device.
- Keep the device and cables away from moisture and dust.
- Clean using a damp cloth with water only.

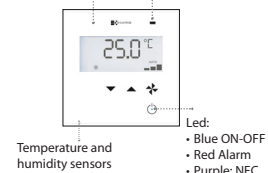
The packaging of this product is considered an industrial container, with the recipient being a professional.
 The manufacturer is not responsible for the incorrect use or installation of the product.
 Read this document before installing the product. Document subject to changes without prior notice.

Product installation

Components location:

NFC antenna for data transfer with EConfigurator APP

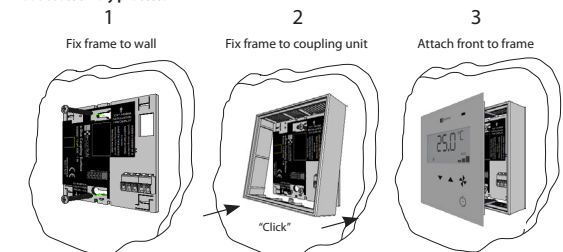
Light and proximity sensor for automatic backlight switch On



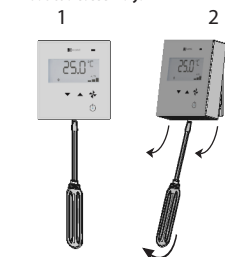
Temperature and humidity sensors

LED:
• Blue ON-OFF
• Red Alarm
• Purple: NFC

Product assembly process:



Product disassembly:



Technical specifications

Power supply	Through e-Bus Coupling Surface
Operating voltage	Configurable
Temperature sensor	
Measurement range	-10°C a 60 °C (+14 °F to 140 °F)
Resolution	0.5 °C
Typical precision between -10 and 60 °C	±0.2 °C
Loss of precision throughout its life	< 0.03 °C / year
Relative humidity sensor	
Measurement range	0 to 100% RH
Resolution	0.1%
Typical precision between 0 and 80 °C	±1.8 % RH
Loss of precision throughout its life	< 0.25% RH / year
Sensor CO2	
Technology	NDIR (Non-dispersive infrared technology)
Measurement range	400 to 2000 ppm (*)
Resolution	1 ppm
Accuracy	± 50 ppm + 5% measurement
Stability with temperature	± 2.5 ppm/°C between 0 and 50 °C
Loss of precision throughout its life	± 50 ppm
Stable measurement value	1 minute
Shelf life	15 years
Volatile Organic Compound	
Measurement range	0 to 500 IAQ (VOC Index)
Resolution	1 IAQ (VOC Index)
Precision	± 15 IAQ (VOC Index)
Front panel sensors	
NFC interface for device configuration through APP	
Proximity field sensor for automatic switch On LCD backlight.	
Light sensor for automatic switch Off LCD backlight.	
Pushbuttons	
Type	Capacitive
Quantity and functions	According to model
LCD Display	
Type	Backlight liquid crystal
Visible area dimensions	61x26 mm
Backlight color	White LED
On/Off Led indicator	
On/Off function:	Configurable
Default values:	
• HVAC OFF	Blue LED On
• HVAC ON	Blue LED Off
Reset device / Alarm	Red
Working temperature	
Operation	0 °C to +50 °C (32 °F to 122 °F)
Storage	-10 °C to +85 °C (14 °F to +185 °F)
Humidity (non-condensing)	
Operation	0% to 95% RH at 50 °C
Storage	Max 95% RH at 50 °C
Mechanical installation	
Installation type	Surface mounting
Recommended mounting height	1,5 m from floor
Mechanical characteristics	
Dimensions (with frame)	86 x 86 mm
Depth (depending on frame selected and assembly)	8,5 or 22 mm
Weight	100 g
Environmental protection level (assembled)	IP20 (EN60529:1991)
Electrical security	See e-Bus Counting mounting frame
CE conformity	
Low Voltage Directive (LVD)	2006/95/EC
Electromagnetic Compatibility Directive	2004/108/EC
Applicable harmonized standards	
Product standard	EN 60730-1:2011
	EN 50491-3:2009
Electrical security	EN 50491-3:2009
	EN 50491-4-1:2012
Electromagnetic compatibility	EN 50491-5-1:2010
	EN 50491-5-2:2010
IEC Protection	Class III
NOTES: (*) Available upon request with range 0 to 5000 ppm	

Ordering numbers

e-Touch Display Mini T+HR 4P White , Touch display with Temperature and humidity sensors, 4 pushbuttons, Front white	TM.214000-000
e-Touch Display Mini T+HR+CO2 4P White , Touch display with Temperature, humidity and CO ₂ sensors, 4 pushbuttons, Front white	TM.314000-000
e-Touch Display Mini T+HR+CO2+COV 4P White , Touch display with Temperature, humidity, humidity CO ₂ and COV sensors, 4 pushbuttons, White	TM.414000-000

Related items

Frame e-Touch Display Mini white 22 mm	FR.000100-100
Frame e-Touch Display Mini black 22 mm	FR.000102-100
e-Bus Coupling Surface RS-485	BC.470011-031
e-Bus Coupling Surface Modbus	BC.470002-031