

# V3 - GRMS Room Compact Modbus - MC-230-01

## General description

**V3 - GRMS Room Compact Modbus - MC-230-01** is a compact GRMS room variant based on the **MC-230-01** controller.

This variant is intended for simplified room configurations where integrated RS485 communication and direct IEX connection are required. Because MC-230-01 includes RS485 and IEX-2 terminals, separate CAD-BC and CAD-232 modules are not required for this room concept.

## Typical use

This variant is suitable for rooms requiring:

- compact controller configuration
- integrated RS485 / Modbus communication
- direct IEX connection
- basic access and room panel functionality
- HVAC control with reduced local I/O requirements
- simplified installation compared to MC-24-H1 based configurations
- Ethernet / Linker connection to S-RMS

## Main components

Group	Component code	Description
Room controller	<b>MC-230-01</b>	Main room controller with integrated Ethernet, RS485 and IEX-2 terminals.
Power supply	<b>230 VAC / MC-230-01 supply</b>	Controller supply. Only one supply option is used according to project configuration.
IEX connection	<b>MC-230-01 IEX-2 terminals</b>	Direct IEX device connection without CAD-BC module.
RS485 / Modbus	<b>MC-230-01 RS485</b>	Integrated RS485 communication for Modbus fan-coil, recuperator or compatible HVAC equipment.
Corridor access panel	<b>CR-D1-V2-PX-BK</b>	Corridor-side access panel for room access, door status and lock control.
Door lock	<b>EL-B / EL-N</b>	Electric door strike, selected according to door type and installation requirements.

Group	Component code	Description
Room touch panel assembly	<b>TGP-4D-01-IQ + TGP-S</b>	In-room 4 inch touch HMI panel with TGP-S adapter/interface board for connecting the ES-W2 room temperature sensor.
Room temperature sensor	<b>ES-W2-WH / ES-W2-BK</b>	Room temperature sensor connected through TGP-S and used for HVAC regulation.
Room PIR sensor	<b>IR-R-IW-WH / IR-R-OW-WH</b>	Presence / motion sensor for occupancy and energy-saving logic.
Window contact	<b>MOS-03-HD-WH / MOS-04-VS-WH / MOS-04-VS-BK</b>	Wired magnetic opening sensor for window status and HVAC interlock, if wired version is used.
HVAC outputs	<b>MC-230-01 outputs / RS485</b>	HVAC control through local outputs or RS485 communication, depending on equipment.
Network	<b>Ethernet / Linker</b>	Connection to S-RMS.

## Connected room functions

Function	Connected elements
Access control	CR-D1-V2-PX-BK, EL-B / EL-N and door status.
Guest interface	TGP-4D-01-IQ room touch panel with TGP-S adapter and room commands.
Room temperature	ES-W2-WH / ES-W2-BK connected through TGP-S.
HVAC	RS485 / Modbus HVAC device or local HVAC outputs, depending on equipment.
Room sensing	ES-W2 room temperature sensor, PIR sensor and window status.
Energy saving	Presence detection, managed power supply and HVAC interlock logic.
Central system	Ethernet connection to Linker and S-RMS.

## Variant difference

Compared to MC-24-H1 based variants, V3 uses **MC-230-01** with integrated **RS485** and direct **IEX-2 terminals**.

This reduces the need for separate CAD communication modules.

## Notes

- V3 is recommended for compact room configurations with limited local I/O requirements.
- TGP-S is part of the room touch panel assembly and is used as the interface board for connecting the ES-W2 room temperature sensor.
- It is suitable when RS485 / Modbus communication is required and the MC-230-01 I/O capacity is sufficient.
- Final equipment compatibility must be checked per project.