Meltem®
VENTILATION & HEAT RECOVERY

INSTALLATION INSTRUCTIONS AND USER GUIDE

Part no. 744013EN, Week 03/2020 EN

Gateway M-WRG-GW

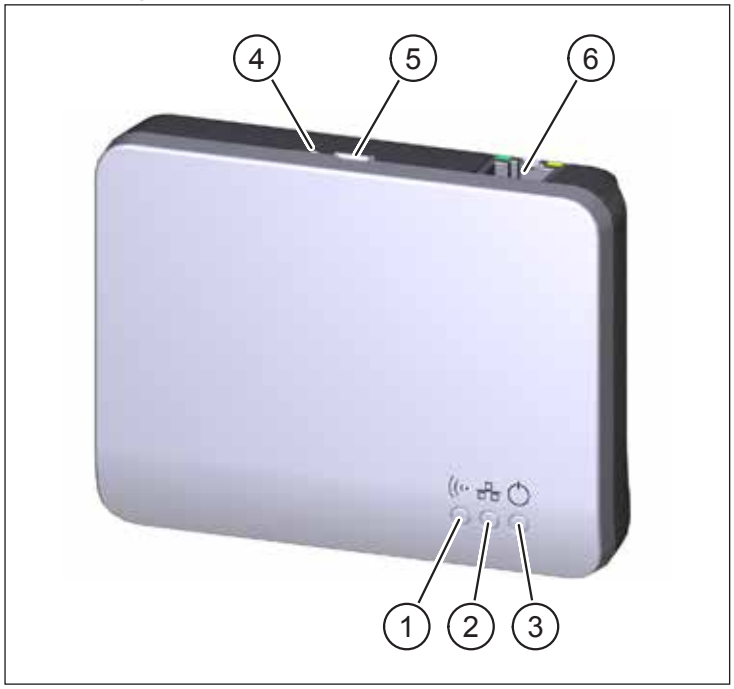

Fig. 1: Gateway M-WRG-GW

Item in Fig. 1	Description
1	Wireless connection LED
2	Network LED
3	Power LED
4	Reset button
5	Power supply connection
6	Ethernet connection

1 Introduction

1.1 Notes on these instructions

These instructions contain important information that should be followed when installing the M-WRG-GW gateway.

► Read all the instructions carefully to avoid possible risks and mistakes.

► These instructions are part of the product. Keep the instructions in a safe place for future reference.

NOTICE

► When operating the ventilation unit, also follow the operating instructions that were supplied with your unit.

1.2 Description

The M-WRG-GW gateway is used for cloud-based operation of ventilation units from the M-WRG-II and M-WRG series constructed from 2020 onwards (excluding bus unit types) via an iOS or Android app. The gateway forms the interface between the ventilation unit(s) and the Meltem app. It can be used to control, program and read the units decentrally, centrally on site or online from anywhere in the world. It is used to create time programs for different controllers to suit the unit configuration. The user can also program various unit functions and sensors. The app is used to create a personal user account for configuring and managing the gateway. Communication between the gateway and ventilation units is also established and controlled via the app. Data protection has top priority; the data is fully encrypted and can only be released by the user. Up to 20 units may be logged into a gateway; the number is only limited by the wireless range.

The following components are needed to control the ventilation units using the app:

— Ventilation units from the M-WRG-II and M-WRG series constructed from 2020 onwards (excluding bus unit types)
— Smartphone or tablet, iOS or Android operating system
— Meltem app
— M-WRG-GW gateway with Meltem cable and mains adapter
— Router with Internet access (provided by the customer)

The gateway can also be used in parallel with the M-WRG-FBH wireless remote control, M-WRG-FT 4-way wireless pushbutton switch, M-WRG-II FSF wireless humidity sensor and M-WRG-II FSC wireless CO_2 sensor and in conjunction with the U^2 installation version and all M-WRG-II and M-WRG covers.

1.3 Target group

These instructions are intended for users of the M-WRG-GW gateway. No special prior knowledge is needed.

1.4 EU declaration of conformity

The gateway described below
Type: M-WRG-GW
Part number: 5453-00
manufactured by
Meltem Wärmerückgewinnung GmbH & Co. KG
Am Hartholz 4
D-82239 Alling
conforms to the regulations and standards listed in the EU Declaration of Conformity.

1.5 Technical data

Product characteristics	
Dimensions (W x H x D)	105 mm x 80 mm x 25 mm
Weight	approx. 90 g
Colour	white, similar to RAL 9010
Material of the plastic parts	ABS
Ambient conditions	
Ambient temperature during operation	0 °C to 50 °C
Ambient temperature for storage and shipping	-25 °C to 60 °C
Relative humidity	5 % to 90 %, non-condensing
Power supply	
Plug-in mains adapter including cable with micro USB-B connector	230 V AC to 5 V DC, max. 500 mA
Communication	
Communication frequency	868.3 MHz, Rx class 2, minimum output power 0 dBm
Ethernet	10/100 Mbit
Connections	
Ethernet	RJ45 jack
5 V DC power supply	Micro USB-B jack, max. current consumption 200 mA

1.6 Environmentally-friendly disposal

The components of the M-WRG-GW gateway must not be disposed of in the residual waste bin.

► In Germany, metal and plastic components should be disposed of at the local recycling centre. The national regulations in other EU states should also be followed.

► In Germany, electrical components should be disposed of in accordance with the Electrical and Electronic Equipment Act (ElektroG). In other EU states, the national implementation of the Waste Electrical and Electronic Equipment Directive 2012/19/EU (WEEE) should be followed.

► The regulations and statutory requirements in your own country concerning disposal should also be followed.

1.7 Explanation of the symbols used

► This symbol indicates an action to be taken.
— This symbol indicates a list.

2 Safety

The M-WRG-GW gateway is approved only for use in dry interior areas and must be protected against humidity and moisture to prevent short-circuits.

2.1 Notes on operation

This unit may be used by children from 8 years old and by persons of restricted physical, sensory or mental abilities or persons lacking experience and knowledge if they are supervised or have been instructed in how to use the unit safely and understand the associated hazards. Do not allow children to play with the unit. Cleaning and user maintenance must not be carried out by children unless they are supervised.

2.2 Intended use

The M-WRG-GW gateway must only be used to operate M-WRG-II and M-WRG ventilation units. Any different or more extensive usage will be regarded as contrary to the intended use. The intended use also includes compliance with all the notes in these instructions.
For any use contrary to the intended use, Meltem Wärmerückgewinnung GmbH & Co. KG shall accept no liability for any damage that may occur and offers no warranty that the components will work perfectly and correctly.

3 Items supplied

— Gateway M-WRG-GW
— Plug-in mains adapter including cable with micro USB-B connector
— Ethernet cable

4 Installation and set-up

NOTICE

Never install the gateway in a metal enclosure, otherwise wireless communication between the gateway and ventilation unit will not be possible.

4.1 Fixing the gateway to a wall (optional)

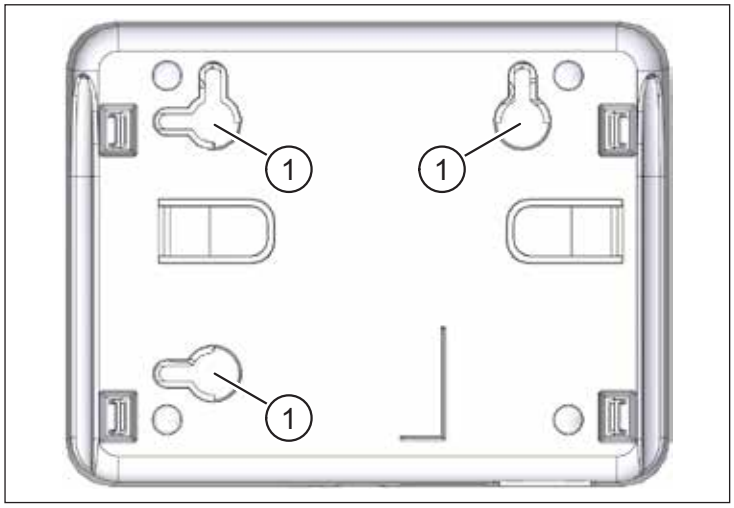

Fig. 2: Cut-outs on the back of the gateway

On the back of the gateway, there are three cut-outs (item 1 in Fig. 2) for screw heads. This will allow you to attach the unit horizontally or vertically to the wall.

4.2 Connecting the gateway

► Take the Ethernet cable provided and use it to connect the Ethernet connection (item 6 in Fig. 1) on the gateway to your network (e.g. using a LAN connection on your router).
► Plug the micro USB-B connector on the mains adapter into the power supply connection (item 5 in Fig. 1) on the gateway.
► Plug the mains adapter into a 230 V socket. The Power LED (item 3 in Fig. 1) lights up. After a few seconds, the green and orange LEDs on the Ethernet connection (item 6 in Fig. 1) also light up.

4.3 Installing the Meltem app and connecting the gateway/ventilation units

► Install the free Meltem app for iOS or Android on your unit.
► Start the Meltem app.
► Create a new user account if you have not already done so.
► Make a note of the access details (login/password) for your user account.
► Follow the instructions on the Meltem app to connect and manage the gateway and ventilation units.

5 Error messages

5.1 LEDs on the front panel (item 1, 2 and 3 in Fig. 1)

LED	Status	Cause	Remedy
	Off	No power supply	Plug the mains adapter into a 230 V socket.
	Flashes	Gateway not starting	Restore the factory settings on the gateway (see section 6)
	Off	No network connection (cloud)	— Run initial set-up using the app — Check LEDs on the Ethernet connection — Check the Internet access
	Off	No wireless connection or no unit registered	Run initial set-up using the app

5.2 LEDs at the RJ45 jack (item 6 in Fig. 1)

LED colour	Status	Cause	Remedy
Green	Off	No Ethernet connection	Check the Ethernet cable
Orange	Off	No DHCP server available: no IP address available	Activate the DHCP server on the network or use a fixed IP address in the app
Orange	Flashes	No DHCP server available: default IP address (192.168.0.207) is used.	

6 Restore the factory settings

► Press the Reset button (item 4 in Fig. 1) using a pointed object (e.g. ballpoint pen) for at least 10 seconds.

All the LEDs go out and then flash. The Power LED (item 3 in Fig. 1) then lights up and the gateway restarts. This process takes around 30 seconds.

NOTICE

When you restore the factory settings, all wireless connections and login information are removed from the gateway.

7 Cleaning

Wipe the outer surfaces from time to time with a soft, damp cloth. Use mild soapy water. Never use acidic, corrosive or abrasive cleaning agents.