MPHIE

3 in 1
TRIPLE CONNECTIVITY

SMART AND CONNECTED CONTROLLER TRIPLE COMMUNICATION PROTOCOL WIFI, ZIGBEE 3.0, BLUETOOTH FOR RADIANT PANEL HEATER

Interchangeable controller module without dismantling the device, can be remotely-controlled thanks to a customizable mobile application, large full black and white screen, auto-programmable with self-learning process and dual optimization feature, occupancy detection, opened window detection, gauge and power consumption indication in kWh

Eligible for
CEE
Energy savings certificates
According to the technical sheet in force

Cloud
Highly secure

Overview

Main features

- Ambient temperature control
- Temperature setting
- Power On / Standby
- Operating modes selection
- Quick heating of the room using the instant Boost
- Automatic and self-learning programming, customized integrated programming or can be programmed remotely using the 6-order pilot wire

Application

- Radiant panel heater

Benefits

- **Ingenious design:** the interchangeable top module ensures flexibility in upgrading or customising the command interface without dismantling the device
- **Directly connectable to the Internet** through the Internet service provider's box, without any other accessory.
- **Interoperability guaranteed** thanks to the ZIGBEE 3.0 protocol integrated into the product.
- **Can be remotely controlled** by your smartphone, tablet or PC thanks to a dedicated and customizable mobile application.
- **Excellent ergonomics of setting:** 2.09 inch backlit black and white interface easy to read, intuitive navigation and easy to use.
- **Lastest generation advanced electronics** with an OTA microprocessor for software remote update.
- **"Smart" electronic control:** This means stable and accurate temperature in the room all year round.
- **Energy saving package,** comfort, performance, energy savings.
- **Auto-programming:** automatic programming by self-learning of the lifestyle.
- **Automatic changeover** summer/winter time.
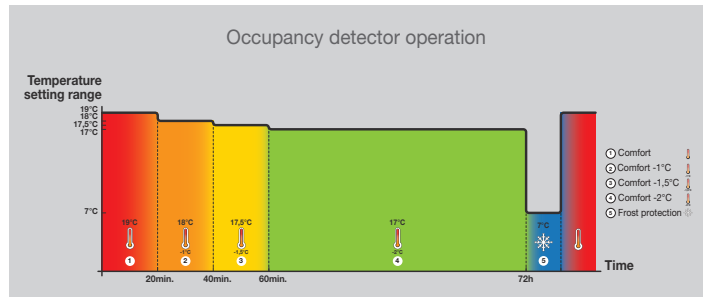- **Permanent saving of settings.**

Functional specifications

Use

Comfort temperature setting	**Preset to +19°C,** adjustable from +7°C to +30°C by interval of 0,5°C
Comfort + temperature setting	**Preset to +21°C,** adjustable from Comfort +1°C to +30°C by interval of 0,5°C
Eco temperature setting	**Preset to +15,5°C,** adjustable from +5°C to +19°C by interval of 0,5°C
Frost protection temperature setting	**Preset to +7°C,** adjustable from +5°C to +12°C by interval of 0,5°C
Operating modes	Auto (programming), Comfort, Comfort +, Eco, Boost, Frost protection, Holidays
Boost	Adjustable between 5 and 90 minutes in 5 minutes intervals: to rise quickly the temperature and turn on the heating for a time period requested
Programmable holidays mode	Frost protection for a long scheduled absence

Digital commands with backlit black and white interface

Occupancy detector operation

Energy consumption gauge	Automatic indication of the level of energy consumption according to the setting temperature
Power consumption indication in kWh	Posting of the estimated amount of energy consumed in kWh since the last 24 hours or since the last reset to 0 of the energy meter
Opened window detection	Automatic switching to Frost protection mode when a significant drop in temperature is detected
Window airing feature	Manual window airing can be enables at any time
Occupancy detection	During an unoccupied period, the setting temperature is automatically and progressively decreased
Auto-programming	As soon as the device is switched on and without any initial adjustment, the device is in learning mode to understand and memorize the user's lifestyle. The integrated smart algorithm is going to analyze this information in real time in order to optimize and adapt the programme for the coming weeks
Programming	- 8 different preset program profiles for each day of the week: Auto-programming, 1 comfort period, 2 comfort period, 3 comfort period, non-stop Comfort mode, non-stop Eco (economy) mode, non-stop Frost protection mode and Comfort + mode (only through app) - Programming assistant to help the user step by step (only through app) - Each day of the week can be customised (day by day or by group of days) - Manual and temporary overriding of a programme
Dual optimization feature	Depending on different parameters of the room, the controller calculates and optimizes the programming of Comfort and economy periods (Eco) according to the choice of the user; **Eco oriented**, priority to savings or **Comfort oriented**, priority to comfort (by default)
Help for the visually impaired	**- The button power on/standby mode is in relief to be easily identifiable to the touch** **- Audible beeps indicating the change from the standby mode to active mode**

Safety	**- Child anti-tamper:** touch screen locking
	- Settings safety :
	  - Min. and Max limits of the adjustment range of the Comfort setting temperature
	  - Customizable PIN code locking (prevents access to the Comfort mode, advanced and expert settings)
	- Time, date and setting backup in case the mains power supply goes off
	- Internal protection against any overheating

3 levels of settings	User, Advanced, Expert

Installation

Easily interchangeable module	Direct assembly on the heating device: - Easy positioning of the controller in the housing provided - Man machine interface (top module) fixed by a single screw	
Protected access to the electrical connection	- Protective cover housing the connectors and covering the connection area - Grommets for the two power supply cables	
Connection to the electrical resistance	Electrical connection via Faston connectors	

User settings

Language use	**Preset to French,** English available
Wifi connexion	**Direct internet connexion** through the Internet provider box thanks to a dedicated mobile app
Backlighting	**3 possible settings:** - Reduced display with low brightness and backlighting when a button is pressed or during occupany detection - Reduced display with low brightness and backlighting when a button is pressed - Reduced display with black screen and backlighting when a button is pressed
Return to the factory settings (user)	

Advanced settings

Occupancy detection	**Enabled by default,** can be disabled
Automatic window-opening detection	**Enabled by default,** can be disabled
Min. setpoint temperature	**Preset at +7°C,** adjustable from +7°C to +18°C by interval of 1°C
Max. setpoint temperature	**Preset at +30°C,** adjustable from +19°C to +30°C by interval of 1°C
Boost duration	**60 minutes by default,** adjustable from 5 to 90 minutes by 5 minutes steps
Window airing cycle duration	**30 minutes by default,** adjustable from 5 to 90 minutes by 5 minutes steps
Dual optimization feature	Comfort by default, Eco and Off available
Connection deactivation (airplane mode)	Possibility to deactivate the product connection
PIN code locking	Initialization - Customization - Activation and deactivation
Return to the factory settings (user and advanced)	

Expert settings

Reduced display brightness	50% by default, from 10% to 100% by intervals of 10 %
Temperature adjustment	Ambient temperature sensor adjustment with automatic adjustment
Power setting (Used for estimation of consumption in KWh)	Adjustable from 300W to 2000W by intervals of 50W
Deleting connection information	Possibility to delete all connection information, the product will no longer be connected
Return to the user factory settings (user, advanced and expert)	

Technical specifications

Dimensional and finish specifications

Height	239,5 mm
Width	116,3 mm
Depth	105 mm
Colors	Anthracite grey
Net weight	582 g

Power supply

Operating voltage	230V AC+/-10% 50Hz
Maximum power	2000W resistive load
Power cord	1200 mm, 3 conductors

Control

Control type Electronic	PID (Proportional Integral Derivative) control, triggered by a triac

Environment

Protection rating	IP24 after installation under the responsability of the integrator
Class	Class II, after installation under the responsability of the integrator
Operating temperature	0°C to +60°C
Temperature setting range	+7°C to +30°C
Storage temperature	-20°C to +70°C
NTC electronic temperature sensor	

Applicable directives

RED	2014/53/EU
RoHS	2011/65/EU
ERP	2009/125/EC

Applicable standards

RED	2014/53/EU
Safety	EN 60335-1 ; EN 60335-2-30 ; EN 62233 ; EN 50385
EMC	ETSI EN 301489-1 ; ETSI EN 301489-17
Radio	ETSI EN 300 328
RoHS	EN IEC 63000
Manufacturing	On certified site ISO 9001 V2015

Product code

The controller (complete kit) consists of a power module and a self-programmable logic module (upper part with control interface).

Codes	Description
Complete kit	
MPHIEDGA	Control unit for CLII panel heater, self-programmable with occupancy detection, 6-order pilot wire
Power module	
MPHPOWDGA	Control subassembly, power module, anthracite grey
Logic module - User interface	
MPHTOPIEDGA	Control subassembly, logic module, self-programmable with occupancy detection, anthracite grey
MPHTOPIDGA	Connected control subassembly, logic module, self-programmable with occupancy detection, anthracite grey

Product customization (style, features) possible on request. Please contact us.