

MITSUBISHI Procon Smart Grid Adapter Instruction Manual

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Safety warnings



Caution:

Do not expose to rain or moisture.



Operating Temperature:

The product has been designed to operate between -20° C and +60° C



Shielded Signal Cables:

Use only shielded cables for connecting peripherals to reduce the possibility of interference with radio communications services. Using shielded cables ensures that you maintain the appropriate EMC classification for the intended environment.



CE Notice:

This product has been determined to be in compliance with 2014/30/EU (EMC Directive), 2014/35/EU (Low Voltage Directive) and 2011/65/EU (RoHS Directive).

UL 61010-1 Electrically Safety Tested.

Class B:

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- · Reorient the receiving antenna.
- Relocate the Smart Grid Adapter with respect to the receiver.
- Move the Smart Grid Adapter away from the receiver.

If necessary, consult a Smart Grid Adapter technical support representative or an experienced radio/television or EMC technician for additional suggestions.

A "Declaration of Conformity" in accordance with the preceding directives and standards has been created.

Disclaimer



Warranty:

All products manufactured on behalf of Mitsubishi Electric Germany are warranted against defective materials for a period of three years from the date of delivery to the original purchaser.



✓ Warning:

Mitsubishi Electric Germany assumes no liability for damages consequent to the user of this product. We reserve the right to change this manual at any time without notice. The information furnished by us is believed to be accurate and reliable. However, no responsibility is assumed by us for its use, nor for any infringements of patents or other rights of third parties resulting from its use.

If the equipment is used in a manor not specified by the manufacturer, the protection provided by the equipment may be impaired.

Amendment Register

Document Version	Latest Fir mware Ver sion	Date	Author	Notes	
1.0.0	1.0.0	20/04/2023	IB	Initial version for firmware v1.0.0	

A Smart Grid Inputs

B CN105 connection lead

[Fig. 1]





Safety precautions

- Before installing the unit, make sure you read all the "Safety precautions".
- The "Safety precautions" provide very important points regarding safety. Make sure you follow them.

Symbols used in the text



Warning:

Describes precautions that should be observed to prevent danger of injury or death to the user.



Caution:

Describes precautions that should be observed to prevent damage to the unit.



Marning:

- Ask the dealer or an authorised technician to install the unit
 - · Improper installation by the user may result in electric shock, or fire
- · Use the specified cables for wiring. Make the connections securely so that any outside forces acting on the cables are not applied to the terminals
 - Inadequate connection and fastening may generate heat and cause a fire
- Never repair the unit. If the controller must be repaired, consult the dealer
 - If the unit is repaired improperly, electric shock, or fire may result
- Have all electric work done by a licensed electrician according to "Electric Facility Engineering Standard",
 - "Interior Wire Regulations" and the instructions given in this manual and always use a special circuit
 - If the power source capacity is inadequate or electric work is performed improperly, electric shock and fire may result
- Keep the electric parts away from any water washing water etc...
 - · Contact may result in electric shock, fire or smoke
- To dispose of this product, consult your dealer



· Safely dispose of the packing materials

 Tear apart and throw away plastic packaging bags so that children can not play with them – If children play with a plastic bag which has not been torn apart, they face the risk of suffocation.

Overview

The Smart Grid Adapter is used to connect Air-to-Air products to the Smart Grid. The interface provides 4 modes of operation. Each mode sends commands to the Air-to-Air product to override settings such as drive and temperature set-point.

State	IN1	IN2	Action
1	0	0	Return to previous state
2	0	1	OFF
3	1	0	ON +1°C
4	1	1	ON +2°C

Before the state is changed from state 1 the current operational state of the system is stored and this state is

resumed once the inputs return to state 1.

The only exceptions to the above are:

- 1. If the user turns the drive off, the unit will go off and remain off even when state returns to 1.
- 2. If the user decreases the heating set point this will be allowed but the stored temperature will be set when the override period ends.

If power is lost, the saved state will also be lost and will be read again from the CN105 when power is restored.

The device is powered via the CN105 connector, hence no external power supply is needed.

Compatible model numbers can be found in the appendices of this document.

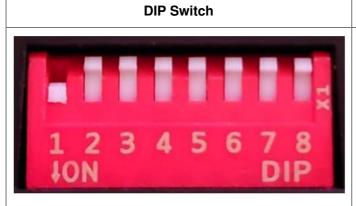


Caution:

Appendix A lists the compatible indoor units.

Figure 1 shows the Procon Smart Grid Adapter.

DIP switch setings



Normal operation Mode. DIP1 ONOthers are OFF

Installation

Physical connection

The Smart Grid Adapter has a 1 metre flying lead to connect directly into the CN105 connector on the controller PCB.

Power supply

The Smart Grid Adapter is powered from the CN105 air conditioner host connector at 12V DC and therefore does not require an external power supply.

Inputs

The Smart Grid Adapter has a 3-way terminal to provide 2 volt free inputs. The terminals are Input 1, Ground and Input 2. An input is 'On' when shorted to the middle Ground terminal.

Status LEDs

There are two status LEDs on Smart Grid Adapter. The LED indications are as follows:

LED Name Colour		Functionality		
AC ACK Green		Lit up for one second when device is power up.lt will flash to indicate v alid communication with the indoor unit.		
MODE Green		Lit when device is in State 1 otherwise unlit		

AC ACK

If this LED do not flashing, check the CN105 connection is secure and the unit type is supported (see appendix).

Technical specification

Parameter	Min.	Тур.	Max.	Comments
Environmental				
Operating temperature				
Indoor or outdoor use			_	Indoor
Altitude	-20°C	< 2000m	60°C	
Relative humidity			_	90% non-condensing
Pollution degree		2	_	
Dimensions Weight				2.0 cm x 5.20 cm x 9.5 cm0.2 kg

Appendix A – Compatible units

Wall Mounted Units

MSZ-RW VG

MSZ-LN VG2

MSZ-EF VGK

MSZ-AY VGK(P)

MSZ-FT VGK

MSZ-HR VG(K)

Floor Standing Units

MFZ-KT VG

MFZ-KW VG

1-Way-/4-Way-Cassette

MLZ-KP VF

SLZ-M FA2

Ceiling Concealed

SEZ-M DA2

Please be sure to put the contact address/telephone number on this manual before handing it to the customer.

MITSUBISHI ELECTRIC EUROPE

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Documents / Resources



MITSUBISHI Procon Smart Grid Adapter [pdf] Instruction Manual Procon Smart Grid Adapter, Procon, Smart Grid Adapter, Adapter, Adapter

References

• User Manual

Manuals+, Privacy Policy

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