# **Air-conditioner network controller** and accessories

Online Controller

External Mounting Kit Wifi Cable Pack

KKRP01A

KKRPM01A

KKRPW01A







Easy **Touch LCD** Wall Controller Wall Controller Temperature Weather KBRCS01A KBRC01A Station P03 Sensor REM п ш 🔵

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# **1. Online Controller KKRP01A**

#### 1.1. Features

Online Controller is an auxiliary module, especially designed for Daikin airconditioning units, which enables to connect indoor split unit into IP network through Ethernet. User can easily monitor and control the air-conditioner



from remote place by using PC, PDA or SmartPhone. Online Controller is plugged into the port S21 on PCB of A/C indoor unit, therefore which is the critical condition of use ability. Online Controller is fully compatible with almost all air-conditioner functions which are allowed by original wireless remote controller.

In addition it supports the facilities such as:

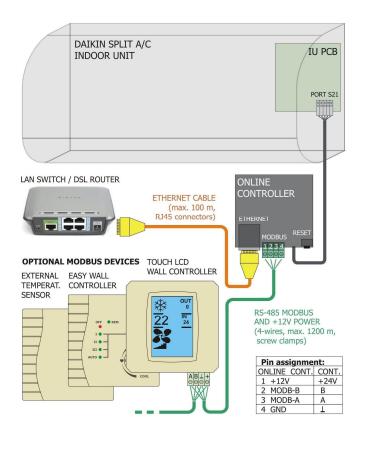
- Web-controller with JAVA (nice.htm)
- Web-controller without JAVA (index.htm)
- Onlinecontroller client with SMS and e-mail control, fault management and commands history
- > Group mode function for central controlling up to 30 A/C units together at the same time
- Back-up function of the A/C system with one more redundant unit
- Three various levels of access
- SNMP agent (SNMP monitoring and fault management)
- > MODBUS for connection of accessories Easy Wall Controller, Touch LCD Wall Controller
- > Thermometer for monitoring of room temperature
- Firmware update ability

#### **1.2.** Specification

Internet parameters		
HTTP with / without JAVA	web-controller nice.htm and index.htm	
DHCP protocol	for automatic acquiring IP address from DHCP server	
DNS protocol	for translating of hostnames into IP addresses	
SNMP protocol	for integrate into SNMP manager	
email alerts	8 event configurations is available	
FTP and telnet protocol	remote firmware update ability	

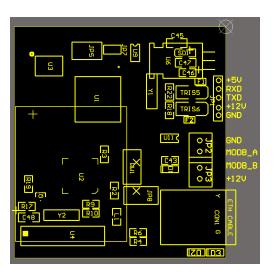
Communication interfaces		
Ethernet LAN 10/100 Mbit/s	for connection into LAN network	
MODBUS	for connection of accessories	
serial S21 cable 1,3 m	for connection with A/C indoor unit	
Power supply	directly from IU - 5 V DC for Online Controller; 12 V DC for accessories	
Power consumption	120 mA, 0,6 W	
IP code	IP10 / IP44 – inside A/C unit	
Others		
Mounting	close to A/C IU - External Mounting Kit, electric box	
Weight	50 g	
Dimensions (w × h × d, mm)	60 × 64 × 20 (without cable and connectors)	
CE	LVD: 2006/95/EC; EMC: 2004/108/EC	

#### 1.3. Drawings



## Description of inputs and outputs

**PINOUT** layout



# 2. External Mounting Kit KKRPM01A

#### 2.1. Features

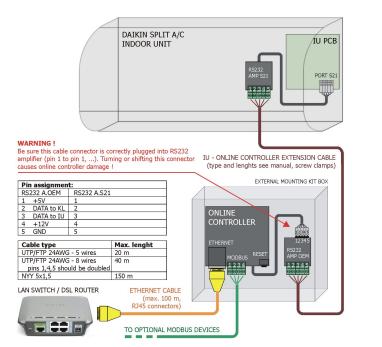
External Mounting Kit is designed for installing Online Controller outside of indoor unit or to extend the length of system S21 cable. It can be easily fitted on the wall or hidden inside the interceilings.



## 2.2. Specification

Communication interfaces		
converter RS232 to S21 serial link	2 amplifiers	
maximum length of RS232 link cable	20 m UTP/FTP 24 AWG – 5 wires only	
maximum length of RS232 link cable	40 m UTP/FTP 24 AWG – 8 wires full	
maximum length of RS232 link cable	150 m NYY 5x1,5mm <sup>2</sup>	
Power supply	directly from IU - 5 V DC ; no external power is required	
IP code	IP40 – plastic enclosure	
Others		
Mounting	on the wall	
Weight	50 g	
Dimensions (w × h × d, mm)	105 × 105 × 55 (without cables)	
CE	LVD: 2006/95/EC; EMC: 2004/108/EC	

## 2.3. Drawings



- Description of inputs
- and outputs
- with 2 amplifiers

# 3. Wifi Cable Pack KKRPW01A

#### 3.1. Features

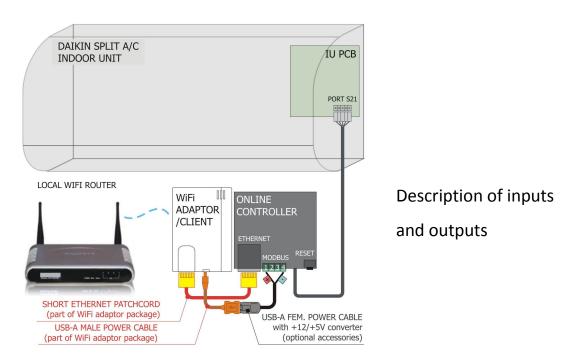
Wifi connection between A/C unit and LAN should be good alternative for case where no Ethernet cable is available. Wifi cable pack is necessary for power supplying the Wifi client (i.e. ASUS WL-330gE, ASUS WL-330N3G, Netgear WNCE 2001 ...) directly from Online Controller.



#### 3.2. Specification

General parameters		
converter DC-DC 12 V to 5 V	12 V DC is available on MODBUS socket in Online Controller	
Ethernet LAN 10/100 Mbit/s	for connection into LAN network	
length of power cable	0,40 m	
length of LAN patch cord	0,40 m	
Others		
Weight	20 g	
CE	LVD: 2006/95/EC; EMC: 2004/108/EC	

#### 3.3. Drawings

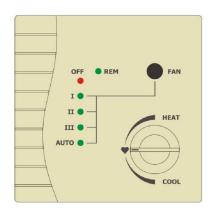


# 4. Easy Wall Controller KBRCS01A

# and Touch LCD Wall Controller KBRC01A

#### 4.1. Features

Easy and Touch LCD Wall Controllers appertain to Online Controller accessories. They were designed for user-friendly operation with air-conditioner unit. Usually they are mounted on the wall; therefore they are useful even in the case of loss of original remote controller.



The Easy Wall Controller's features:

- Switch ON and OFF the air-conditioner
- Control of desire room temperature
- Control of air flow rate
- Adjustable Setpoint range



#### The Touch LCD Wall Controller's features:

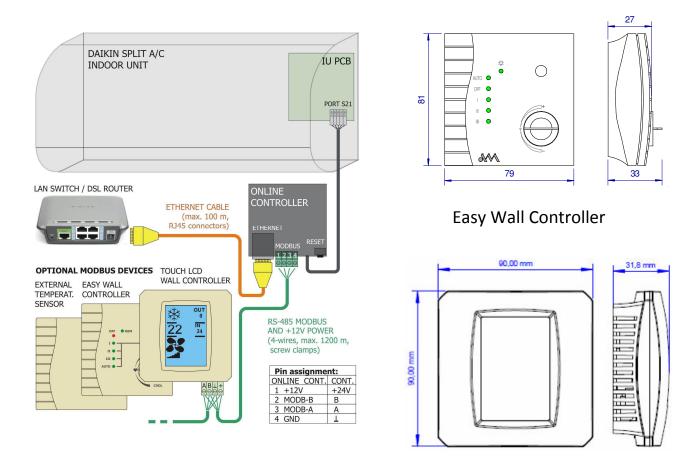
- Full control and monitor of A/C unit
- > 3" B/W touch LCD screen
- blue backlight
- six colour of frame



#### 4.2. Specification

Communication interfaces	Easy Wall Controller	Touch LCD Wall Controller
MODBUS RTU	for connection of accessories	for connection of accessories
Communicate rate	38400 bps	38400 bps
Power supply	directly from IU via Online Controller; 12 V DC	directly from IU via Online Controller; 12 V DC
Power consumption	40 mA	80 mA
IP code	IP20	IP20
Others		
Operating temperature	-10 to 50 °C	-10 to 50 °C
Mounting	on the wall	on the wall
Weight	100 g	100 g
Dimensions (w × h × d, mm)	79 × 81 × 33	90 x 90 x 32
CE	1999/5/EC	1999/5/EC

#### 4.3. Drawings and physical dimensions



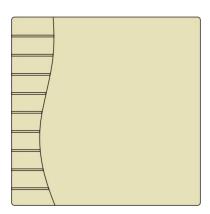
Description of inputs and outputs

Touch LCD Wall Controller

# 5. Temperature Sensor and Weather Station

#### 5.1. Features

Temperature Sensor and Weather Station appertain to Online Controller accessories. They were designed for measuring environment data – temperature, wind speed and information about current weather situation. Usually they are mounted on the wall.



The Temperature Sensor's features:

- Room temperature measuring
- Modbus communication protocol



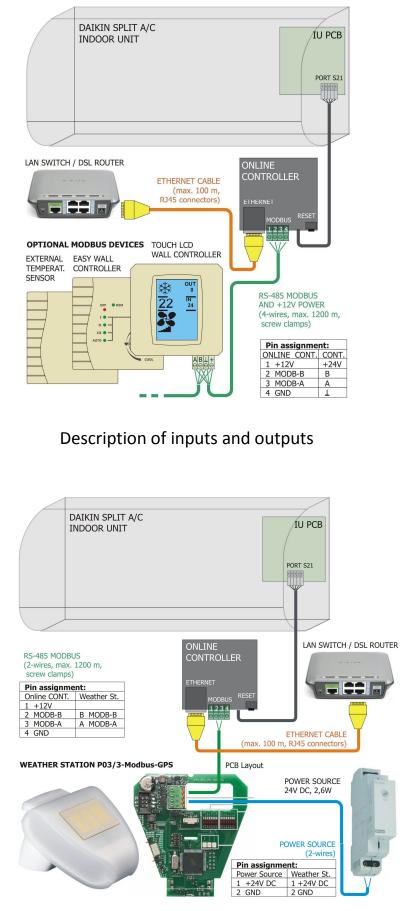
#### The Weather Station's features:

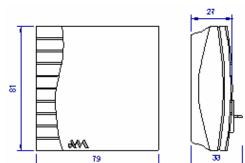
- Temperature sensor
- Brightness measurement with 3 sensors
- ➤ Wind speed sensor
- Heated precipitation sensor

Communication interfaces	Temperature Sensor	Weather Station
MODBUS RTU	for connection of accessories	for connection of accessories
rate	38400 bps	38400 bps
Power supply	directly from IU via Online Controller; 12 V DC	external power source 24 V DC; max. 2,6W
Power consumption	40 mA	105 mA
IP code	IP20	IP44
Others		
Measurement range temperature	-10 to 50 °C	-40 to 80 °C
Measurement range wind		0 to 70 m/s
Measurement range brightness		0 to 99 000 lux
Mounting	on-wall	on-wall
Weight	100 g	160 g
Dimensions (w × h × d, mm)	79 × 81 × 33	96 × 77 × 118
CE	1999/5/EC	EN 60730-1:2000-11+A11:2002

#### 5.2. Specification

#### 5.3. Drawings and physical dimensions





#### **Temperature Sensor**



#### Weather Station

- 1 socket for rain sensor
- 2 connection socket
  - 1: +24V DC
  - 2: GND
  - A: data
  - B: data
- 3 control LED
- 4 antenna set screw