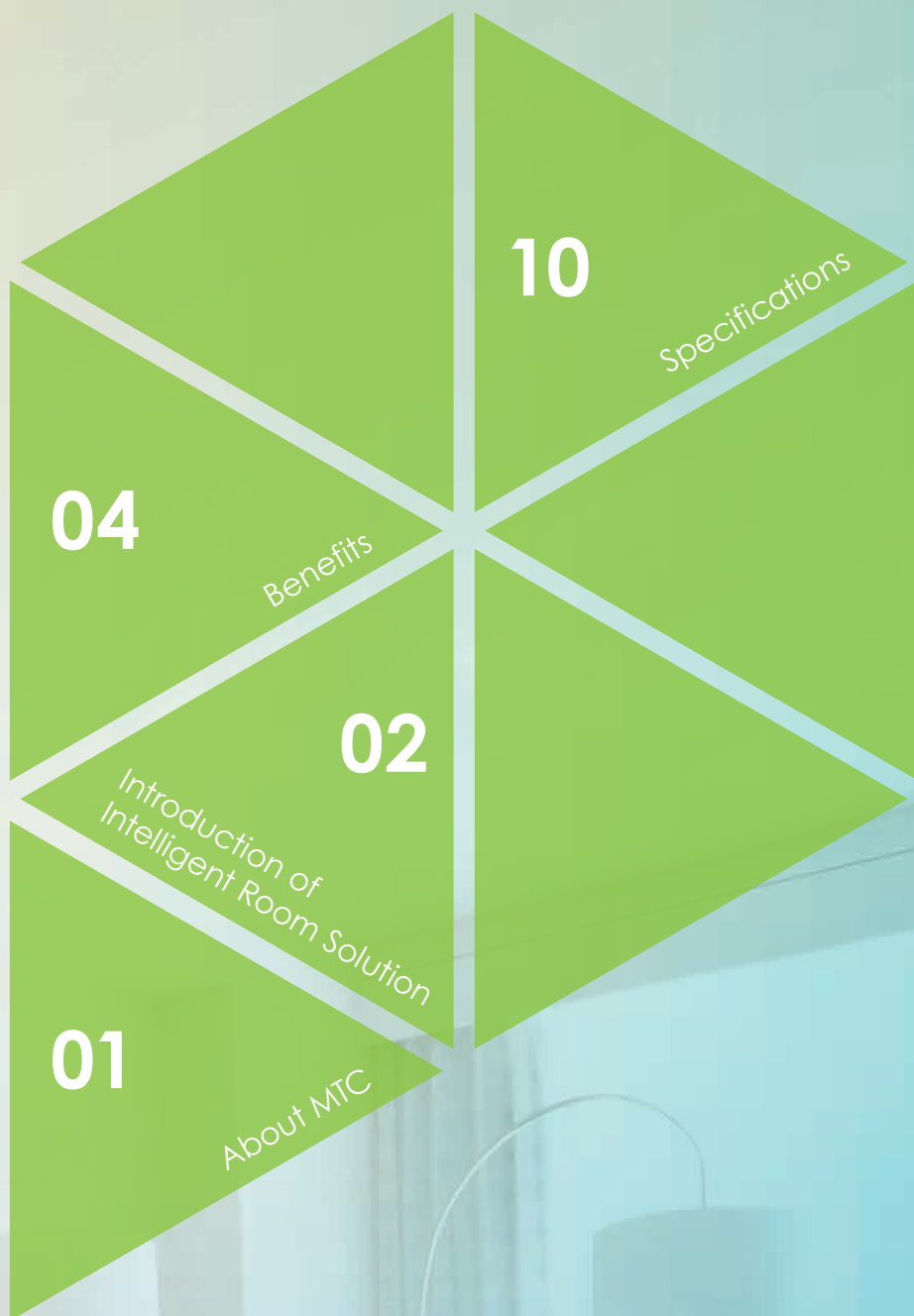


# INTELLIGENT ROOM SOLUTION



# CONTENT





## ABOUT MTC

**MTC** is pioneering a new approach to knowledge sharing. Our innovative solutions are designed with mobility of people, while bringing joy and creativity in information sharing. We empower knowledge transfer and experience sharing through the power of seamless collaboration across the enterprise.

Leading organizations from industries such as Education, Corporate, Retail, Hospitality etc. rely on our wide range of products like Interactive Whiteboards, Interactive LED Displays, Wireless Presentation Systems, Intelligent Room Systems and Lecture Recording System to fulfill their demands for technological advancement. We offer a wide range of comprehensive solutions to support our clients and our worldwide offices backed by a vast network of distributors and resellers ensure a true global coverage.

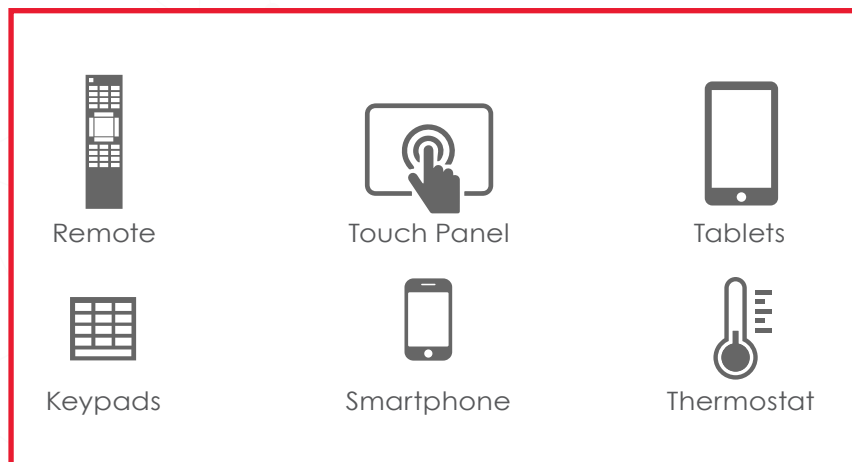
MTC connects different industries with collaborative technologies. MTC products help enhance communication among all people and facilitate a harmonious working and learning environment.

# INTRODUCTION OF INTELLIGENT ROOM SOLUTION

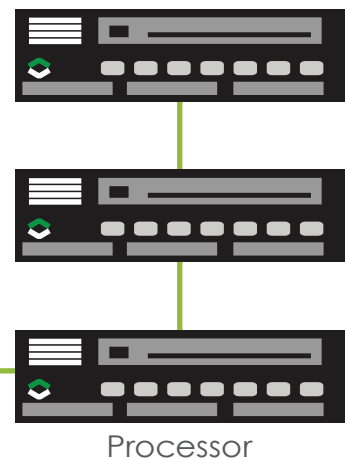
**Intelligent Room Solution (IRS)** is a state-of-the-art hotel guestroom management solution integrating control over multiple systems including HVAC, intelligent lighting & dimming control, temperature control, shades & drapes control, room services and mood control. It also reflects real-time room status, guests' demands, service status and equipment conditions. In virtue of its rich features and compatibility, and with the connection to the Guest Room Management System (GRMS) interface, our IRS is an essential element of hotel's overall intelligence.

## INDIVIDUAL ROOM

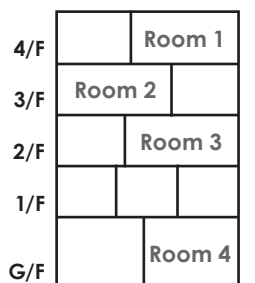
Devices in Each Guestroom



Intelligent Room System Modules



## NETWORKING



Hotel Guestroom

Hotel Network



GRMS Server  
(collect room details)

## MARKET TRENDS

In the era pursuing intelligence, energy efficiency and convenience, a hotel guestroom becomes more than just a place to stay for resting, but also a place to bring guests with memorable sensational experience. To fulfill rising demands for technology advancement and to stand out from competitors, it is essential for a hotel to deploy Intelligent Room Solution to create a high-tech and intimately comfortable environment for striving for guests' recognition and return.

## ADVANTAGES



Energy saving with reduced energy cost



Preset comfortable ambiance before guest's arrival



Easy operation of multiple in-room systems at guest's fingertips



Manage hotel resources and energy usage more effectively



Analyze customer behaviors for future marketing strategy



Create emotional scenes with drapes, lightings and music control



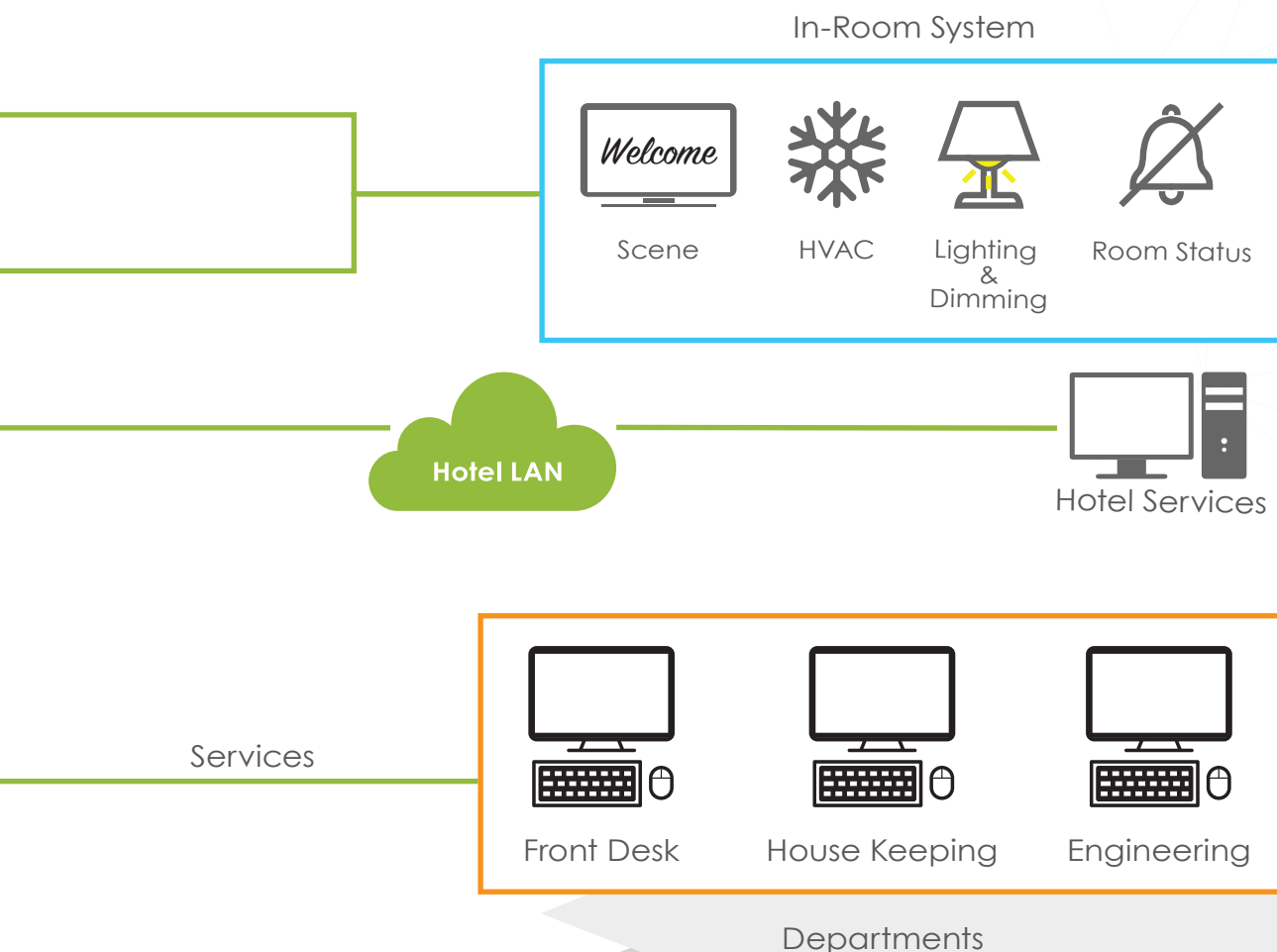
Centralized control by operators over various guestrooms



Enhance operational efficiency and productivity



Provide data for management to analyze for future resources planning and energy management





## BENEFITS FOR...

### **GUESTS – EXPERIENCE UNPRECEDENTED COMFORT & CONVENIENCE!**

Comfort of a hotel guestroom has direct impact on guest's impression on the hotel. Hotel could maximize guests' comfort by the function of presetting room temperature or any preferred scene, presenting a pleasant room ambiance upon guests' entrance to the room. Guests could make service requests, such as make-up-room or other room services, simply by pressing a button and housekeeping department could then be notified and responded quickly. IRS could minimize disturbance to guests by occupancy detection or display of "do-not-disturb" button, ensuring absolute privacy of guests.



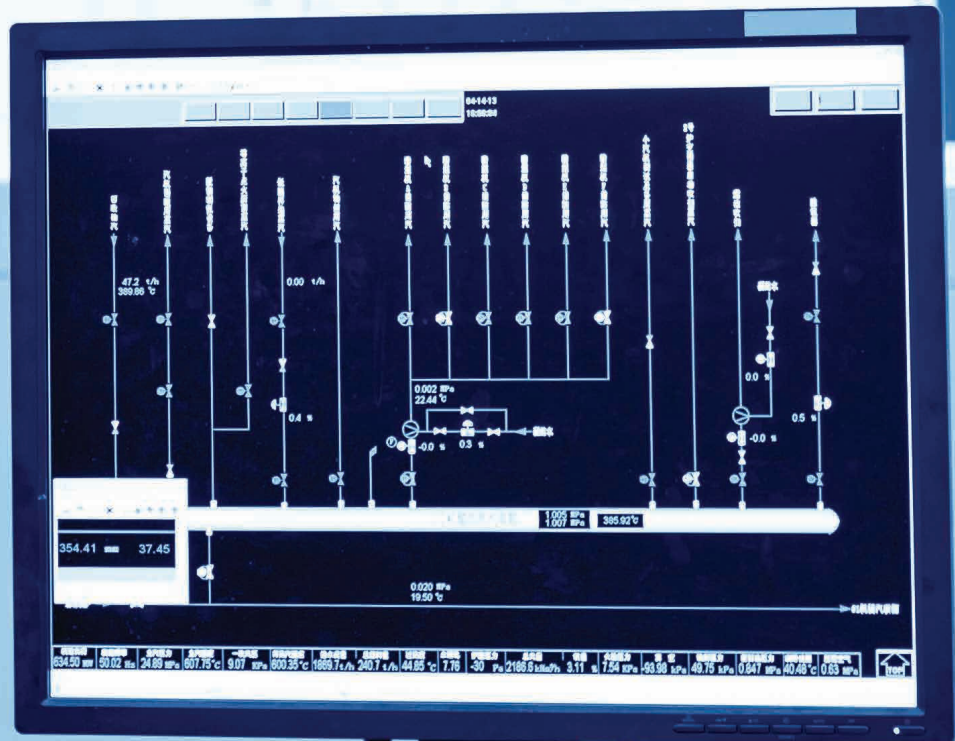
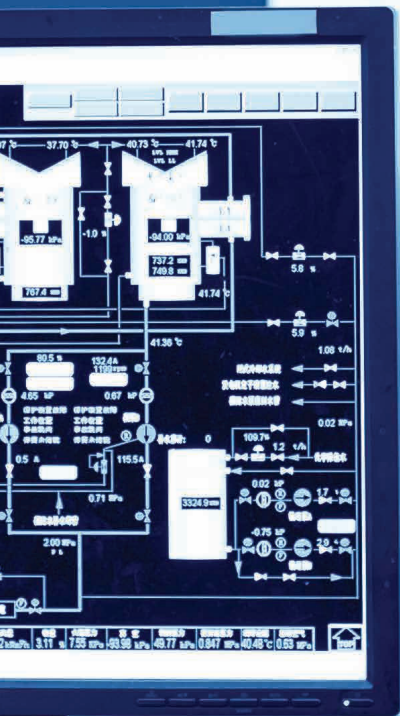
Accentuating relaxation and convenience with our all-in-one IRS, guests no longer have to move around to switch on / off the lights and TV, or to control air conditioning system and drapes. All could be done at guests' fingertips!

Featuring customized and optimal room settings, our IRS turns hotel guestrooms to more than just accommodation, and also a memorable element to the guests' journey.



## **HOTEL OPERATORS – CONTROL GUESTROOMS AND MANAGE ENERGY USAGE EASILY & EFFICIENTLY!**

With the powerful integration of Property Management System (PMS) and IRS, hotel operators could acquire real-time status of various devices / systems in all guestrooms, regardless of locations. They are able to monitor and control temperature, humidity, lightings, scenes or drapes of multiple or individual room, assuring pleasant in-room atmosphere. To provide exceptional personalized services to hotel guests, the operators could preset a welcome / VIP scene with background music to welcome them with surprise and delight.



Immediate notification of room occupancy status enables easy scheduling of make-up room service and improved response to room services or emergency repair requests. The simplified process enhances operational efficiency and staff productivity, and helps operators to optimize manpower allocation.

Air conditioning consumes a vast amount of energy due to round-the-clock operation time. With the function of occupancy sensing, smarter energy management could be achieved. In-room systems would be turned off or switched to standby mode automatically once no one is detected in the room, saving energy consumption and cost.

For the sake of fully utilizing manpower and resources to enrich guest experience, let's go green and smart with our Intelligent Room Solution!





## HOTEL MANAGEMENT – UNDERSTAND GUEST BEHAVIORS FOR BETTER PLANNING!

Intelligent room control system provides data like room occupancy duration and time, frequently used systems and their energy consumption, preferred in-room temperature, housekeeping schedule, types of room service requested, movie viewed, and more.

By analyzing those data, management could study guest behaviors for further marketing, energy and resources planning, and understand employee work patterns for better human resources management. Unnecessary energy and manpower wastage could be avoided to achieve savings in operating costs and energy consumptions. It is an assured win-win situation for saving the environment and costs at the same time.



Giving guests comfortable and personalized accommodation experience, guest satisfaction and hotel's reputation goes higher, and creates more business opportunities in return. Regardless of the initial installation cost, the hotel shall be economically benefited in the long run.



# SPECIFICATIONS OF IRS MODELS

## Model No: IRS-CP

### Description: Control Processor



The IRS CP is a room system control processor for conversion and translation between RoomNet and TCP/IP protocol. It consistently communicates with the system management software server for monitoring and controlling the room facilities.

The IRS-CP can act as a room server. It stores all modules in-room IRS Panel function preset. During module replacement, each module can download their preset function from the room gateway when powers on. It also allows engineer to remotely upgrade and access the room system.

## Product Specification

### Connection

Net:	(2) 4 pins 3.5mm detachable terminal blocks
Com:	(1) 4 pins 3.5mm detachable terminal blocks
LAN:	(1) 8 wire RJ45 with 2 LED indicators, 10/100 Base Ethernet port

### Indicators

TX/RX:	(2) Blue LEDs, indicate data throw to/from RoomNet
TX/RX (COM):	(2) Blue LEDs, indicate data throw to/from COM port
BUS:	(1) Red LED, indicate the testing status
RUN:	(1) Green LED flashing when device operated normally

### Control

RESET:	(1) Recessed miniature pushbutton, reset the module
W1:	(1) Recessed miniature pushbutton, clear scene data

## Enclosure

Light gray polycarbonate housing with polycarbonate label overlay, UL94 V-0, 35mm DIN EN 60715 rail mounted, DIN 43880 form factor of enclosure with 45 mm front panel cutout, occupies 4 DIN module space (72 mm)

### Environmental

Operation temperature:	0°C - 45°C
Operation humidity:	20% - 90%

### Dimension

Height:	90 mm
Width:	72 mm
Depth:	58 mm
Weight:	170 g

## Features

- TCP/IP and RoomNet communication
- Reset function
- Standard 35mm DIN rail mounting

## Model No: IRS-SW8

### Description: 8-Channel High-Voltage Switch



The IRS-SW8 is an 8-channel power control module which to support ON/OFF switching for non-dimmable lighting and sockets. A single model supports from 100 to 240 Volts AC applications. Each channel handles the loading up to 12 Amps.

## Product Specification

### Loading Rating

Switch channels:	8
Module total loading:	96A, 100-240V AC, 50/60HZ
Maximum per channel:	12A, 100-240V AC, 50/60HZ
Relay capacitive loading:	< 50uF
Relay life/ Endurance:	>60,000 press
Load types	Incandescent, neon/ cold cathode, fluorescent or other lighting/ curtain device that need switch control

### Connection

CH 1-8:	(8) 2-pin 5mm detachable terminal blocks
Net:	(2) 4-pin 3.5mm detachable terminal blocks

### Indicators

Channel 1-8:	(8) Red LEDs for status indication
TX/RX:	(2) Blue LEDs indicate data throw to/from other modules on the same bus
RUN	(1) Green LED flashing when device operated normally
OVR	(1) Red LED for override mode indication

### Control

NET ID:	(1) 8 Digital physical address switch for setting RoomNet ID
OVR:	(1) Recessed miniature pushbutton, enable override mode, device will bypass program to provide power for all channels directly
RESET	Recessed miniature pushbutton, reset the module

### Power Requirements

RoomNet power usage:	1.2Watts (50 mAmps@24 Volts DC)
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## Enclosure

Light gray polycarbonate housing with polycarbonate label overlay, UL94 V-0, 35mm DIN EN 60715 rail mounted, DIN 43880 form factor of enclosure with 45 mm front panel cutout, occupies 4 DIN module space (72 mm)

### Environmental

Operation temperature: 0°C - 45°C

Operation humidity: 20% - 90%

### Dimension

Height: 90 mm

Width: 144 mm

Depth: 58 mm

Weight: 320 g

## Features

- 8 Channels of power switching
- Support 100 to 240V AC, 50/60 Hz
- Control up to 8 independent zones
- Each zone have 12 programmable scenes
- Proprietary RoomNet communication
- Override control
- Reset function
- Standard 35mm DIN rail mounting

## Model No: IRS-DIM4

### Description: 4-Channel Dimmer



The IRS-DIM4 is a DIN rail mounted lighting control module with four dimming channels. Each single model supports from 100 to 240V AC. Each channel handles loading up to 3 Amps and the total loading for 4 channels is 12 Amps.

#### Safety Cutoff Relay

When any of the channel dim fully off the internal relative relay will be turned on automatically. It can provide isolation for safe operation and change the light bulbs on all four controlled circuits.

## Product Specification

### Loading Rating

Dimmer channels:	4
Maximum per Channel:	3A, 100-240V AC, 50/60Hz
Module total loading:	12A, 100-240V AC, 50/60Hz
Load types:	Incandescent

### Connection

CH 1-4:	(4) 2-pin 5mm detachable terminal blocks
Live & neutral:	(1) 2-pin 5mm detachable terminal blocks
Net:	(2) 4-pin 3.5mm detachable terminal blocks

### Indicators

Channel 1-4:	(4) Red LEDs show the status for each channel
TX/RX:	(2) Blue LEDs indicate data throw to/from other modules on the same bus
RUN:	(1) Green LED flashing when device operated normally
OVR:	(1) Red LED for override mode indication

### Control

NET ID:	(1) 8 digital physical address switch for setting RoomNet ID
OVR:	(1) Recessed miniature pushbutton, enable override mode, device will bypass program to provide power for all channels directly
RESET:	(1) Recessed miniature pushbutton, reset the module

### Input Voltage

Line power:	100 – 240Volts AC, 50/60Hz
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### Power Requirements

RoomNet power usage:	1.08 Watts (45mAmps@24 Volts DC)
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## Enclosure

Light gray polycarbonate housing with polycarbonate label overlay, UL94 V-0, 35mm DIN EN 60715 rail mounted, DIN 43880 form factor of enclosure with 45 mm front panel cutout

### Environmental

Operation temperature: 0°C - 45°C

Operation humidity: 20% - 90%

### Dimension

Height: 90 mm

Width: 144 mm

Depth: 58 mm

Weight: 310 g

## Features

- 4 dimming channel
- Support 100 to 240V AC, 50/60 Hz
- Control up to 4 independent zones
- Proprietary RoomNet communication
- Override control
- Reset function
- Standard 35mm DIN rail mounting

**Model No:** IRS-DIMA4  
**Description:** 4-Channel 0-10V Dimmer



The IRS-DIMA4 is a 4-channel lighting control module designed to support dimming of 0-10 Volts DC analogue input dimming ballasts. Each single model supports 100–240 Volts AC applications. Each channel is able to handle up to 12 Amps loading.

## Product Specification

### Loading Rating

Dimmer channels:	4
Maximum per channel:	12A, 100-240V AC, 50/60Hz
Module total loading:	48A, 100-240V AC, 50/60Hz
Dim load types:	0-10V DC analogue input dimming ballasts
Switch load types:	Incandescent

### Connection

CH 1-4:	(4) 2-pin 5mm detachable terminal blocks Voltage control range from 0 – 10V DC
0-10V:	(1) 8-pin 3.5mm detachable terminal blocks
Net:	(2) 4-pin 3.5mm detachable terminal blocks

### Indicators

Channel 1-4	(4) Red LEDs show the status for each channel
TX/RX	(2) Blue LEDs indicate data throw to/from other modules on the same bus
RUN	(1) Green LED flashing when device operated normally
OVR	(1) Red LED for override mode indication

### Control

NET ID	(1) 8 Digital physical address switch for setting RoomNet ID
OVR	(1) Recessed miniature pushbutton, enable override mode, device will bypass program to provide power for all channels directly
RESET	(1) Recessed miniature push button reset the module

### Power Requirements

RoomNet power usage:	1.08 Watts (45mAmps@24 Volts DC)
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## Enclosure

Light gray polycarbonate housing with polycarbonate label overlay, UL94 V-0, 35mm DIN EN 60715 rail mounted, DIN 43880 form factor of enclosure with 45 mm front panel cutout

### Environmental

Operation temperature:	0°C - 45°C
Operation humidity:	20% - 90%

### Dimension

Height:	90 mm
Width:	144 mm
Depth:	58 mm
Weight:	250 g

## Features

- Provide 4 channels of 0-10V dimming control
- Support 100-240V AC, 50/60 Hz
- Proprietary RoomNet communication
- Override control
- Standard 35mm DIN rail mounting



## Model No: IRS-DIMR2

## Description: 2-Channel Dimmer

The IRS-DIMR2 is 2 channels dimmer. A single model supports 100 – 240V electronic and magnetic low voltage, incandescent, neon/cold cathode, 2-wire dimmable fluorescent.

### Product Specification

#### Loading Rating

Switch channels:	2
Maximum per channel:	3A, 100-240V, 50/60Hz
Module total:	6A, 100-240V, 50/60Hz
Loading types:	Incandescent, halogen lamp, high voltage halogen lamp

#### Connection

CH 1-2:	(2) 2-pin 5mm detachable terminal blocks
NET:	(2) 4-pin 3.5mm detachable terminal blocks
Input:	(1) 2-pin 5mm detachable terminal blocks

#### Indicators

Channel 1-2:	(2) Red LEDs show the status of each channel
TX/RX:	(2) Blue LEDs indicate data throw to/from other modules on the same bus
RUN:	(1) Green LED flashing when device operated normally
OVR	(1) Red LED for override mode indication

#### Control

NET ID:	(1) 8 Digital physical address switch for setting RoomNet ID
OVR:	(1) Recessed miniature pushbutton, enable override mode, device will bypass program to provide power for all channels directly
RESET:	(1) Recessed miniature push button reset the module

#### Power Requirements

RoomNet power usage:	1.08 Watts (45mAmps@24 Volts DC)
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## Enclosure

Light gray polycarbonate housing with polycarbonate label overlay, UL94 V-0, 35mm DIN EN 60715 rail mounted, DIN 43880 form factor of enclosure with 45 mm front panel cutout

### Environmental

Operation temperature: 0°C - 45°C

Operation humidity: 20% - 90%

### Dimension

Height: 90 mm

Width: 144 mm

Depth: 58 mm

Weight: 320 g

## Features

- 2 Channel of power switching
- Support 100 to 240V AC, 50/60 Hz
- Control 2 independent zones
- Can set upper and lower loading limited for various lighting device
- Override control
- Proprietary RoomNet communication
- Standard 35mm DIN rail mounting

## Model No: IRS-TSIO

### Description: HVAC Controller



The IRS-TSIO is a HVAC controller for 4 – pipe valve system. Through the system thermostat PID logic, module can control the FCU fan speed, cooling and heating of HVAC. A single module supports from 100 to 240 Volts AC Fan Coil Unit.

## Product Specification

### Loading Rating

Fan control:	3-speed on/off fan coil
Valves control:	Cooling and heating, power on and power off valve control

### Connection

Fan speed:	(1) 4-pin 5mm screw terminal, 100-240V AC, 50/60Hz
Valve:	(1) 5-pin 5mm screw terminal, 100-240V AC, 50/60 Hz
Net:	(3) 4-pin 3.5mm detachable terminal blocks

### LED Indicators

HEAT:	(1) Red LED indicates heating
COOL:	(1) Red LED indicates cooling
HI:	(1) Red LED indicates high fan speed
MED:	(1) Red LED indicates medium fan speed
LOW:	(1) Red LED indicates low fan speed
TX/RX:	(2) Blue LEDs, indicate data throw to/from other IRS modules on the same bus
OVR:	(1) Red LED for override mode indication
RUN:	(1) Green LED flashing indicates the module operation

### Control

OVR:	(1) Recessed miniature pushbutton to enable override mode. Device will provide power to “Med” port directly
Net ID:	(1) 8 digital physical address switch for setting RoomNet ID
Reset:	(1) Recessed miniature pushbutton, resets the module

### Power Requirements

RoomNet power usage:	0.72 Watts (30 mAmps, 24 Volts DC)
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## Enclosure

Light gray polycarbonate housing with polycarbonate label overlay, UL94 V-0, 35mm DIN EN 60715 rail mounted, DIN 43880 form factor of enclosure with 45 mm front panel cutout, occupies 4 DIN module space (72 mm)

### Environmental

Operation temperature: 0°C - 45°C

Operation humidity: 20% - 90%

### Dimension

Height: 90 mm

Width: 72 mm

Depth: 58 mm

Weight: 190 g

## Features

- 3 Fans Speed: Low, Medium, High
- Override control
- Cooling and heating mode
- Reset function
- Standard 35mm DIN rail mounting



**Model No:** IRS-PIR

**Description:** Microwave and Passively Infrared Intrusion Detector

This intrusion detector adopts advanced signal analysis technology, which can effectively prevent false alarms due to various environmental factors, so as to prevent illegal invasion and to safeguard lives and properties of banks, hospitals, factories, schools, residential and any other facilities.

## Product Specification

### Technical Parameters

Operating voltage:	DC12V
Operating current:	Static: $\leq 25\text{mA}$ ; Active: $\leq 20\text{mA}$
Operating temperature:	$-10^{\circ}\text{C} \sim 50^{\circ}\text{C}$ ( $14^{\circ}\text{F} \sim 122^{\circ}\text{F}$ )
Sensor:	Dual passive pyroelectric sensor
Anti-white light level:	10000LUX
Detection range:	6m diameter ( $25^{\circ}\text{C}$ )
Alarm output:	NC/NO available to choose from
Anti-dismantle output:	NC (50mA 30VDC)
LED indicator:	ON/OFF available to choose from
Dimension:	120*33mm

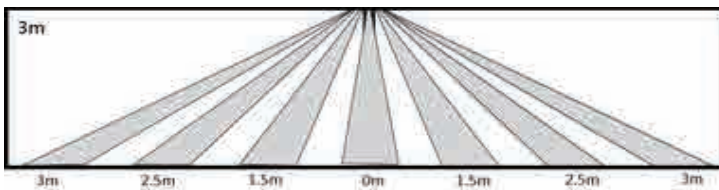
## Operation and Modulation

1. Self-checking time: 60 seconds
2. Testing by using normal walking speed to walk within the coverage area of the detector, there will be a corresponding indicator light on and output alarm signal
3. To ensure microwave to be triggered at static status, another test should be carried out after each indicator is turned off for about 1 minute
4. RELAY jumper (JP2) is to set the status of alarm output, according to specifications of different types of hosts to select different output status. Select 1 & 2 as NC (normally closed), 2 & 3 as NO (normally open), and the factory setting is set to be normally closed
5. Microwave potentiometer is used to adjust the range of microwave detector, users can adjust according to actual needs
6. P. COUNT jumper is for setting waveform as either 1P or 2P: 1 & 2 as 1P, 2 & 3 as 2P  
Sensitivity adjustment: 1P represents high sensitivity, adaptive to a normal environment; 2P represents low sensitivity, adaptive to environment with slight interference

## Indicators

When the green indicator light is on:	Indicates infrared rays are triggered
When the orange indicator light is on:	Indicates microwaves are triggered
When the red indicator light is on:	Indicates both infrared rays and microwaves are triggered, detector will start the alarm mode

## A side view of the detection area



## Features

- Infrared and microwave detection technology
- Digital intelligent logic analysis technology
- Imported high-end infrared detector
- Wall mounted, unique design featuring easy disassembly
- Temperature compensation function, reducing the influence on ambient temperature
- Sensitivity can be adjusted to accommodate different environmental requirements
- Anti-dismantle function
- Attractive and patent appearance



Model No: IRS-DB  
Description: Doorbell

Electronic doorbell is featured loud and clear ringing, users can choose either ding-dong bell or buzz bell by switching the built-in mini on/off button. The housing is made of advanced PC plastic, making it long-lasting and avoids discoloring. Built-in optical coupling circuit is applicable to occasions requiring control over long distance, and control cables and other complex signals using the same wire. It can effectively avoid interference.

Using a TVS protective cable in coordination with a buck resistor, the doorbell features surge protection. The built-in voltage regulator circuit allows normal operation under input DC of 9V to 36V. Electronic doorbell adopts wired 9V-36V power supply, and can also be used independently. It can also be applied to hotel intelligent doorbell control systems.

## Product Specification

### Technical Parameters

Power supply:	DC 6V-36V, supply current over 500mA
Volume:	about 55-65dB

### Dimension

Length:	130 mm
Width:	85 mm
Height:	25 mm

## Applications

Widely used in luxury hotels, office buildings and other places, and also applied to apartments, townhouse and other modern facilities

## Features

- Can choose either ding-dong bell or buzz bell
- Built-in optical coupling circuit
- Effectively avoid interference
- Surge protection
- Built-in voltage regulator circuit

Model No: IRS-PI4032

Description: 40-Input, 32-Output Digital Interface



The IRS – PI4032 is a DIN rail mount automation control module that allows third party dry contact custom control panel to interface to the IRS system. It provides 40 digital inputs and 32 digital outputs.

## Product Specification

### Connection

Net:	(2) 4-pin 3.5 mm detachable terminal blocks, paralleled port
Digital input:	(4) 10-pin quick lock terminal blocks
Digital output:	(4) 8-pin quick lock terminal blocks
12VDC source:	(4) 1-pin quick lock terminals
Reference ground:	(4) 1-pin quick lock terminals

### Indicators

TX/RX:	(2) Blue LEDs indicate data throw to/from other modules on the same bus
RUN:	(1) Green LED flashing when device operated normally
BUS:	(1) Red LED indicates testing status

### Control

Net ID:	(1) 8 digital physical address switch for setting RoomNet ID
W1:	(1) Recessed miniature pushbutton for module input/output testing
RESET:	(1) Recessed miniature push button reset the module

### Power Requirements

RoomNet power usage: 0.72 Watts (30mAmps, 24V DC)

### Enclosure

Light gray polycarbonate housing with polycarbonate label overlay, UL94 V-0, 35mm DIN EN 60715 rail mounted, DIN 43880 form factor of enclosure with 45 mm front panel cutout, occupies 8 DIN module space (144 mm)

### Environmental

Operation temperature:	0°C - 45°C
Operation humidity:	20% - 90%

### Dimension

Height:	90 mm
Width:	144 mm
Depth:	58 mm
Weight:	300 g

### Features

- Allow third party dry contact custom control panel to IRS system
- Provide 40 digital inputs and 32 digital outputs
- Standard 35mm DIN rail mounting



**Model No:** IRS-PWS242  
**Description:** Power Supply

IRS-PWS242 is a 24V DC power supply module that features short circuit and over voltage protection. It enables start-up at high current.

It is designed to snap onto a standard DIN rail for installation in a wall mount enclosure. Modular installation alongside IRS DIN rail automation control modules and other third-party DIN rail mountable devices is enabled. Using daisy-chaining, all wiring connections could be used to link up and transmit the DC power to each IRS module.

## Product Specification

### Loading Rating

Power input:	AC 100-240V
Frequency:	50~60Hz
Output voltage:	DC 24V
Power supply of bus:	2500mA
Parallel pattern:	Directly operate in parallel
Output overload/Short circuit protection:	Electronic current-limiting
Input protection:	Overvoltage, short circuit protection

### Environmental

Operation temperature:	0°C - 45°C
Operation humidity:	20% - 90%
Stored temperature:	-40°C - +55°C
Stored humidity:	10% - 93%

### Installation

Installation:	Standard 35mm rail mounting
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### Dimension

Length:	144 mm
Width:	88 mm
Height:	66 mm

Model No: IRS-DS  
Description: Door Sensor



Door sensor is a security alarm system. If the thieves attempt burglary and once the door is pushed, the door and door frame will be moved, leading to the shift of the door sensor and magnetic body. (Radio) signal will then be sent immediately to the host, and the host will activate the alarm accordingly.

## Product Specification

### Design

Main materials: Imported ABS casing; Japan OKI reed switch; 1007#/24# 350mmUL wire  
Color: Optional

### Operating Details

Working distance: about 20mm  
On/Off patterns: NC--- Normally closed (circuit alarm)  
NO--- Normally open (path alarm)  
NO&NC--- Normally open & normally closed  
Fixture: Embedded

Model No: IRS-TS100, IRS-TS200, IRS-TS300

Description: Thermostat

A thermostat is a device to control the temperature of an indoor environment. It can switch heating or cooling devices on or off, or regulate ventilation and wind speed, so as to maintain the desirable temperature. Integrating HVAC with this automation system helps lower energy bills and enriches user experience.

## Product Specification



Parameters			
Working voltage:	DC 24V	DC 12V	DC 12V
Power usage:	35mA/DC24V	80mA/DC 12V	80mA/DC12V
Communication:	RoomNet	RS485, asynchronous half-duplex communication	RS485, asynchronous half-duplex communication
Working current:	Max35mA	Max 80mA	Max 80mA
Communication rate:	125Kbps	9600 bps	9600 bps
Installation			
Installation:	Standard 86 box	Standard 86 box	Standard 86 box
Environmental			
Operation temperature:	0°C - +45°C	-20°C - +55°C	-20°C - +55°C
Operation humidity:	20% - 90%	20% - 90%	20% - 90%
Storage temperature:	-40°C - +55°C	-40°C - +55°C	-40°C - +55°C
Storage humidity:	10% - 93%	10% - 90%	10% - 90%
Operation			
Temperature range:	16° - 32°	10° - 30°	16° - 32°
Temperature control mode:	Cool, Heat, Ventilation, Auto	Cool, Heat	Cool, Heat, Ventilation, Dehumidification, Auto

## Features

IRS-TS100	IRS-TS200, IRS-TS300
<ul style="list-style-type: none"><li>● LED indicator and LCD Display</li><li>● Display temperature, wind speed, time, mode etc.</li><li>● Reset function</li><li>● Remote programming and management functions</li><li>● Can select available or specific scene after resetting device</li><li>● Proprietary RoomNet communication</li></ul>	<ul style="list-style-type: none"><li>● LED and LCD display</li><li>● Display temperature, wind speed, mode etc.</li><li>● Reset function</li><li>● Can select available or specific scene after resetting device</li><li>● Modbus transmission control protocol</li></ul>

## Product Specification

## IRS-Panel

### General Panel

Product image:



Model number:	IRS-PL-SW001-R	IRS-PL-SW002-R	IRS-PL-SW003-R	IRS-PL-SW004-G
Dimension:	86mm*86mm	86mm*86mm	86mm*86mm	86mm*86mm
Bottom cover dimension:	Standard 86 box	Standard 86 box	Standard 86 box	Standard 86 box
Features:	Double LED backlight	Double LED backlight	Double LED backlight	Dry contact point with auto lock function

### ELV Panel

Product image:



Model number:	IRS-PL-LV003	IRS-GC-LV005	IRS-GC-LV004	IRS-FT-LV005
Dimension:	86mm*86mm/ 90mm*90mm	86mm*86mm	86mm*86mm/ 90mm*90mm	90mm*90mm
Bottom cover dimension:	Standard 86 box	Standard 86 box	Standard 86 box	Standard 86 box
Features:	Built in CAT6 network socket	The blind plate of plastic	TV panel	EHV 220V

### Thermostat Panel

Product image:



Model number:	IRS-PL-TM200	IRS-MF-TM300	IRS-MF-KI002-R
Dimension:	86mm*86mm	86mm*86mm/ 90mm*90mm	90mm*90mm
Bottom cover dimension:	Standard 86 box	Standard 86 box	Standard 86 box
Features:	ELV Networking	ELV Networking	Non-identifiable dry contact signal output

### Key Insert

## IRS-Panel

### Multimedia Panel

Product image:



Model number:	IRS-PL-MM001	IRS-PL-MM002	IRS-FT-MM001	IRS-FT-MM007
Dimension:	86mm*86mm	86mm*86mm/ 90mm*90mm	90mm*90mm	90mm*90mm
Bottom cover dimension	Standard 86 box	Standard 86 box	Standard 86 box	Standard 86 box
Features:	Rotary switch	Multimedia faceplate	Rotary control knob	Multimedia faceplate

### Power Sockets

Product image:



Model number:	IRS-PL-HV002	IRS-PL-HV004	IRS-FT-HV004	IRS-PL-HV005
Dimension:	86mm*86mm/ 90mm*90mm	86mm*86mm	90mm*90mm	86mm*86mm
Bottom cover dimension:	Standard 86 box	Standard 86 box	Standard 86 box	Standard 86 box
Features:	Rated current 10A, USB Rated current 1A	Built in transformer	Built in transformer	EHV 220V

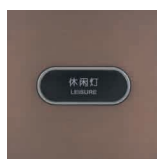
### Power Sockets



Model number:	IRS-FT-HV005	IRS-GC-HV003	IRS-FT-HV003	IRS-FT-HV001
Dimension:	90mm*90mm	86mm*86mm	90mm*90mm	90mm*90mm
Bottom cover dimension:	Standard 86 box	Standard 86 box	Standard 86 box	Standard 86 box
Features:	EHV 220V	Max loading 10A	Max loading 10A	Max loading 10A

## Switch Panel

Product image:



Model number:	IRS-GC-SW001-R	IRS-GC-SW002-R	IRS-GC-SW003-R	IRS-GC-SW004-R
Dimension:	86mm*86mm	86mm*86mm	86mm*86mm	86mm*86mm
Bottom cover dimension:	Standard 86 box	Standard 86 box	Standard 86 box	Standard 86 box
Features:	RS485 with double LED backlight touch switch	RS485 with double LED backlight touch switch	RS485 with double LED backlight touch switch	RS485 with double LED backlight touch switch

## Switch Panel

Product image:



Model number:	IRS-GC-SW005-R	IRS-GC-SW006-R	IRS-FT-SW001-R	IRS-FT-SW002-R	IRS-FT-SW003-R
Dimension:	86mm*86mm	86mm*86mm	90mm*90mm	90mm*90mm	90mm*90mm
Bottom cover dimension:	Standard 86 box	Standard 86 box	Standard 86 box	Standard 86 box	Standard 86 box
Features:	RS485 with double LED backlight touch switch	RS485 with double LED backlight touch switch	RS485 with double LED backlight touch switch	RS485 with double LED backlight touch switch	RS485 with double LED backlight touch switch







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