

RA 6013/6025 Digital Infrared Radiator

- RA 6013 covers up to 1300 m² (one carrier, 4 interpretation channels)
- RA 6025 covers up to 2600 m² (one carrier, 4 interpretation channels)
- Convection cooling for silent operation (no fan noise)
- LED indicators for easy status verification



Description

The RA 6000 series radiators are used in the DCS 6000 Digital Infrared Wireless Audio Distribution System. The system allows participants to listen on headphones to the conference in a variety of languages. Audio is transmitted wirelessly to the receiver, where each individual can select the channel and adjust the volume to the headphones. The system is useful in a variety of installations, such as multi-purpose halls, hotels, or conference centers.

The RA 60xx transmits up to 32 channels in superb sound quality and is available in two model variations:

Model Name	Coverage Area
RA 6013	1300 m ²
RA 6025	2600 m ²

The DIS Digital IR system can transmit audio in four modes. The standard quality mode uses less bandwidth and can be used for transmitting speech. For music, the premium quality mode provides near-CD quality.

- Mono, standard quality, maximum 32 channels
- Mono, premium quality, maximum 16 channels
- Stereo, standard quality, maximum 16 channels
- Stereo, premium quality, maximum 8 channels

Features

- RA 6013 covers up to 1300 m² (one carrier, 4 standard quality channels)
- RA 6025 covers up to 2600 m² (one carrier, 4 standard quality channels)
- Power output selection for efficiency and economy
- Universal mains power facility allows use worldwide
- No fan- cooled by convection- resulting in silent operation
- LED indicators for radiator status checking
- Communication between radiator and transmitter for easy checking by the operator
- Automatic switching when transmitter is switched on and off
- Automatic gain control ensures the IR-LEDs (IR Light Emitting Diodes) function with maximum efficiency
- Automatic cable equalization ensures maximum transmission efficiency with different quality of cables
- Automatic cable termination simplifies installation
- Temperature protection circuitry automatically switches radiator from full to half power, if the temperature becomes too high
- Brackets for mounting on a ceiling and a floor stand are included, simplifying installation
- Adjustable radiator angle ensures maximum coverage
- IR-LED's protected by a cover plate, making the units easy to maintain and clean
- Attractive and stylish design

Specifications

Electrical

IR transmission wavelength	870 nm
Modulation frequency	Carriers 0 to 5; 2 to 6 MHz, according to IEC 61603 part 7 Carriers 6 and 7; up to 8 MHz
Protocol and modulation technique	DQPSK, according to IEC 61603 part 7
Number of IR-LED's	260 (RA 6013)
Total IR output at 20°C - room temp.	RA 6013: 11 Wrms 22 Wpp RA 6025: 21 Wrms 42 Wpp
Total optical peak intensity	RA 6013: 12 W/sr RA 6025: 24 W/sr
Angle of half-sensitivity	+/-22°
HF input	Nominal 1Vpp, minimal 10 mVpp
Mains Voltage	90 to 260 V, 50 to 60 Hz
Power Consumption	RA 6013: 100 W (standby 8 W) RA 6025: 180 W (standby 10 W)

Interconnections

Connector	HF input and output connectors (2 x BNC) for connection to transmitter and loop-through to other radiators
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Mechanical

Mounting	<ul style="list-style-type: none"> Ceiling: suspension bracket (included) Wall: brackets Stand: plates for floor stands with M10 and 1/2" Whitworth thread
Switches	<ul style="list-style-type: none"> Power (full or half) Signal delay (rotary)
LED Indicators	For each panel radiator panel: Yellow = On and receiving carrier signal Red = standby mode Red and Yellow solid = error Red flashing and Yellow solid = temperature protection mode
Dimensions (W x H x D) without bracket	RA 6013: 300 x 500 x 175mm RA 6025: 300 x 500 x 175mm
Color	Bronze and black
Weight without bracket	RA 6013: 6.8 kg RA 6025: 9.5 kg
Weight with bracket	RA 6013: 7.6 kg RA 6025: 10.3 kg
Temperature range	Transport: -40 to +70°C (-40 to 158°F) Operation: 5 to 45°C (41 to 113°F)

Certifications

The DCS 6000 system conforms to standard IEC 60914. The DIS Digital Infrared System fully complies with the IEC 61603-PART7, which is the industry standard for digital infra-red transmission in the 2 to 6 MHz frequency band.



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How To Order

High-power IR digital radiator; 16Wpp (2-8 MHz)	RA 6013
Infrared High Power IR Digital Radiator; 32Wpp (2-8 MHz)	RA 6025
Wall mount bracket for IR Radiators series RA 60xx	WB 6000
Floor stand for IR Radiators series RA 60xx Black	FS 6000
10m RG59 Cable	EC 6100-10
20m RG59 Cable	EC 6100-20
50m RG59 Cable	EC 6100-50

Drawing

