TOA INFRARED SPEAKER IR–820SP(Y)

■DESCRIPTION

The Infrared Wireless Microphone System using this IR–820SP is a PA system designed for use in the school classrooms assuming that their size is about 10 m × 10 m (30 ft × 30 ft).
The IR–820SP is a ceiling–mounted powered speaker with the infrared receiver and offers a wide frequency range of high–quality sound output. It features a digital amplifer for the amplification section, and a full–range speaker for the speaker section.
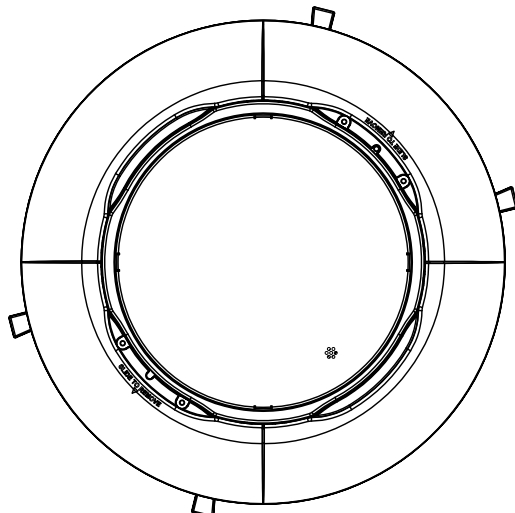Use of the supplied mounting hardware and optional HY–TB1 Tile Bar Bridge permits it to be versatilely mounted to match a wide range of applications and installation locations. This speaker is combined with an infrared wireless microphone and the IR–802T Infrared Wireless Tuner to make up the infrared wireless microphone system.
The infrared microphone system eliminates problems with interference or eavesdropping, allowing simultaneous use in adjacent school classrooms.
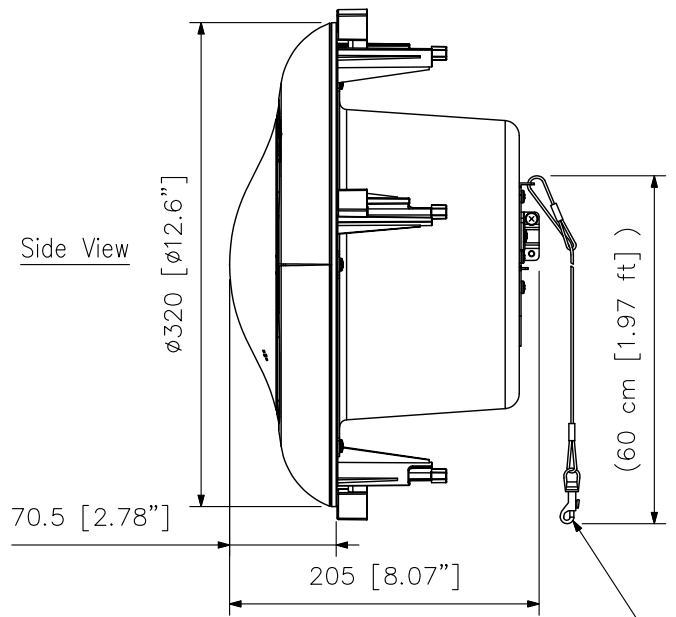
■SPECIFICATIONS

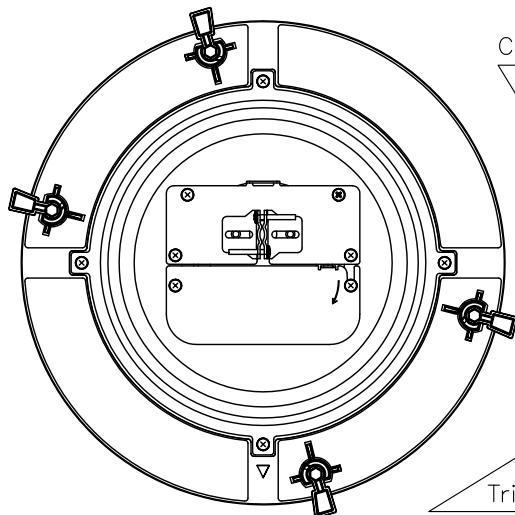|	
Power Source	24 V DC (supplied from IR–802T)
Power Consumption	4.4 W (based on UL standards)
Rated Output	20 W
Frequency Response	100 Hz − 20 kHz (−10 dB) at installation in 1/2 free sound field (Measured by installing the unit in the center of a ceiling.)
Amplification System	Class D
Distortion	5 % or less (rated output)
Speaker Component	12 cm (4.72") cone–type
Infrared Wireless Receiver	
Wavelength	870 nm
Carrier Frequency	Teacher (Channel A): 3.100 MHz
	Student (Channel B): 3.350 MHz
Reception Angle	360° (Horizontal)
Connection Terminal	RJ–45
LED Indicator	Power (green) × 1
UL Code	UL60065, UL2043
Mounting Hole	∅300 mm (∅11.81")
Usage Cable	CAT–5 UTP
Operating Temperature	−10 °C to +50 °C (14 °F to 122 °F)
Operating Humidity	90 %RH or less (no condensation)
Finish	Enclosure: Steel plate, plating Baffle: Fire–resistant ABS resin (resin material grade: UL94V–0), white Punched net: Steel plate, white Filter section: Polycarbonate, optical cut filter
Dimensions	∅320 × 205 (D) mm (∅12.6" × 8.07")
Weight	3.4 kg (7.5 lb)
Accessory	Safety wire ⋯1, Ceiling reinforcement ring ⋯1, Trim ring ⋯1, Paper pattern ⋯1
Option	Tile bar bridge: HY–TB1

TOA Corporation

TOA

INFRARED SPEAKER

IR-820SP(Y)

■APPEARANCE

Front View

Side View

ø320 [ø12.6"]

70.5 [2.78"]

205 [8.07"]

(60 cm [1.97 ft])

Safety wire
(accessory)

Rear View

Ceiling reinforcement ring
(accessory)

ø300 [ø11.81] (Mounting hole)

Max.131 [5.16]

Max.37 [1.46]
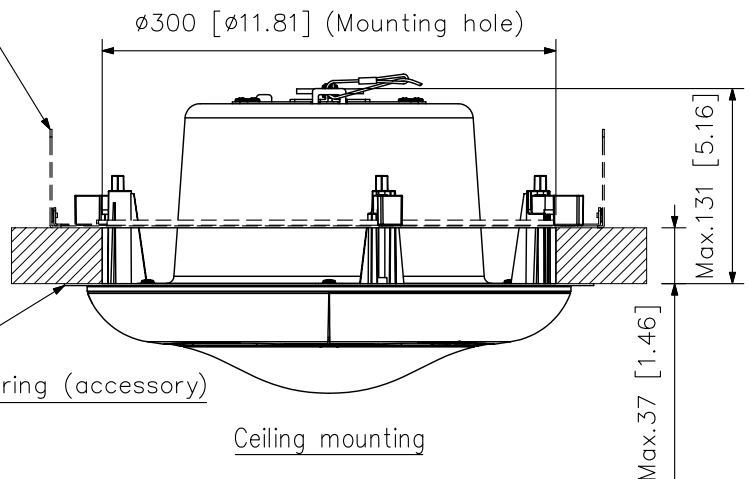
Trim ring (accessory)

Ceiling mounting

ø350 [ø13.78"]

1.2 [0.05"]

ø235 [ø9.25"]

Trim ring (accessory)

ø366.5 [ø14.43"]

ø300 [ø11.81"]

65 [2.56"]

9.5 [0.38"]

47.3 [1.86"]

30 [1.18"]

1.2 [0.05"]
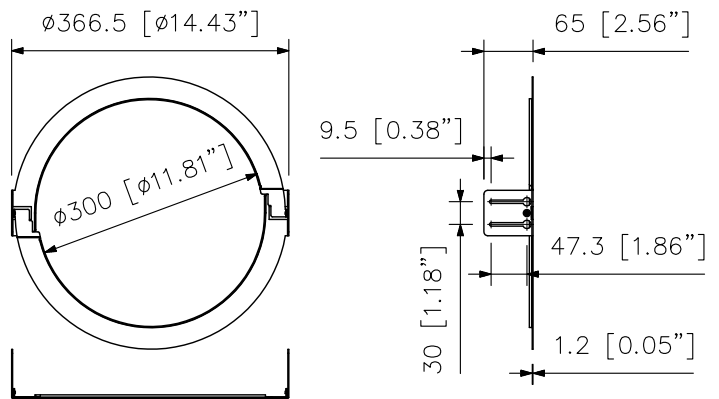
Ceiling reinforcement ring (accessory)

UNIT:mm   SCALE:1/5 Note: The dimensions related to the antennas apply only to EA version of the Wireless sets.