Integrated speaker unit with IPC2

Description
The WAVES Integrated Speaker Unit (ISU-8121), part of the ALERiTY mass notification platform, is a high-efficiency audible device that delivers high-quality, crisp voice announcements. It can be used for both indoor and outdoor applications and is generally installed to provide coverage in areas where obstructions may block a High Power Speaker Array (HPSA), for example in between buildings. The ISU-8121 can also be used in buildings with higher levels of ambient noise such as industrial buildings.

The ISU-8121 includes:
- 4 external horn loudspeakers - 8 ohm
- 1 IP Communicator (IPC2)
- 1 NEMA 4X enclosure
- 1 18 Ah battery and charging electronics (UPS-8002)

The ISU loudspeakers, Wheelock STH-15, feature superior intelligibility and dispersion to achieve maximum sound projection and penetration. The speakers are double re-entrant loudspeakers that handle 15-watts of power and incorporate high-compression drivers to project sound over long distances or wide areas with fewer loudspeakers. Weather-resistant metal construction and reentrant acoustic path assure protection against water, humidity, vermin and corrosion.

The communication device located in the ISU enclosure is an IPC2, which provides a secure, robust and reliable Ethernet communication network. The IPC can be wired directly to a LAN or through its own private network or it can be connected to an Eaton approved radio (RADIO-900M or RADIO-500G) for wireless communications, including two radio configurations (repeaters) for the RADIO-500G only. The IPC2 sends audible, visual and data messages via an RTP multicast stream. Each IPC2 has a unique address in the WAVES network and is individually software controlled from the Integrated Base Station (IBS-8400 series). The IPC2 provides supervision and monitoring at end nodes. Each IPC2 unit conducts supervisory built-in self-tests (BIT) that are reported periodically or on-demand to the WAVES IBS where it is displayed and logged.

The ISU-8121 includes a UPS batter charger (UPS-8002), which can charge up to an 18 Ahr 12 VDC battery. An optional solar charger can be added to this product to supplement DC power.

*See separate specification sheets.*
Features & benefits

- Integrated audible device for outdoor or indoor applications
- NEMA 4X weather resistant enclosure
- Broadcasts high-quality voice announcements
- Both single and dual radio operations (RADIO-500G only)
- Clear voice and signal transmission
- Continuously monitoring itself, BIT (Built-in Test) information transmitted to the WAVES Integrated Base Station
- Uninterruptible Power Supply (UPS-8002) battery charger with 18 Ah battery
- Optional Solar Backup Battery Charger available

Ordering information

- ISU-8121 (speakers included)
- IPC-8121 (speakers not included)

Supporting equipment & accessories

- Eaton approved radios (RADIO-900M or RADIO-500G)
- Antennas
- Solar Backup Battery Charger (for AC backup, not intended for primary power source)
- UPS-8002

Compliance

- TUV

Note: Due to continuous development of our products, specifications and offerings are subject to change without notice in accordance with Eaton’s standard terms and conditions.

Architects and engineers specifications

The outdoor integrated speaker unit shall be model ISU-8121 or equivalent that shall provide high-quality, crisp voice announcements and visual notification for outdoor applications. The integrated speaker unit shall include four (4) horn loudspeakers, one (1) IP Communicator (IPC2) and one (1) 18 Ah battery and battery charger (UPS-8002) enclosed in a NEMA box.

The speaker unit’s horn loudspeakers shall be equipped with a compression driver providing up to 15 watts RMS power handling capability, superior intelligibility and dispersion to achieve maximum sound projection and penetration. The horn loudspeakers shall be weather-resistant metal construction with a reentrant acoustic path to assure protection against water, humidity, vermin and corrosion.

The speaker unit shall also have the following regulatory compliance: TUV & RoHS.

Speaker specifications

<table>
<thead>
<tr>
<th>Power Rating</th>
<th>15 Watts continuous</th>
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</thead>
<tbody>
<tr>
<td>Frequency response</td>
<td>400 - 7,000 Hz</td>
</tr>
<tr>
<td>Sensitivity</td>
<td>120dB at 15 watts (peak), 116dB at 15 watts/1 Meter, (avg) 500 Hz - 6,000 Hz 106 dB 1 Watt / 1 Meter (avg), 500 Hz - 6,000 Hz</td>
</tr>
<tr>
<td>Dispersion angles</td>
<td>70° (-6dB, 2,000 Hz octave band)</td>
</tr>
<tr>
<td>Weight</td>
<td>3.5 lbs. (1.6 kgs) per speaker</td>
</tr>
<tr>
<td>Finish</td>
<td>Grey baked epoxy</td>
</tr>
<tr>
<td>Dimensions</td>
<td>77/8” W x 8 3/4 H x 9 5/16”D</td>
</tr>
</tbody>
</table>

General specifications

| Dimensions                  | 19.92 H x 15.92 W x 11.12 D (inches) / 40.5 H x 43.99 W x 19.89 D (cm) |
| Housing                    | NEMA 4X enclosure                   |
| AC Input                   | 110-240 VAC, 50-60Hz, .5A           |
| DC Input                   | 12 - 15 VDC, 850 mA - 5.91A; 18 Amp hour battery included |
| Battery Charger            | UPS-8002 for the 18 Ah battery charger |
| Operating/storage temperatures | -40F to 140F (-40C to 60C)/-40F to 158F (-40C to 70C) |
| Humidity noncondensing     | 10% - 93% RH @ 90F (32C)            |
| Weight                     | 50 lbs. (23 kg), including the 13 lb. battery |

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We encourage and support NICET certification. 18 month warranty