

# IPS1600



## All Hazard In-Plant Personnel Warning System

*Whelen's IPS Series products deliver clear, powerful voice and tone warnings, eliminating confusion at the onset of an emergency.*

### SYSTEM FEATURES

- **IPS1600**
- Two compartment (Type II) natural finish aluminum cabinet
- Public address and pre-recorded voice message capability
- Battery powered with 2 lead acid batteries
- AC temperature compensated "tri-mode" 10 amp battery charger
- Local or remote controls available
- Four power amplifiers
- Electronic controller
- Tone Generator timer
- Local control push-buttons
- Battery switch
- **SLIDEOUT™** - Pull out battery tray
- Lightning arrestor
- Six standard warning tones: Wail, Whoop, Alert, Attack, Hi-Lo, Airhorn
- **RDVM1G**, Digital voice option, 1-28 message capable

### SYSTEM OPTIONS

- **Microphone** – for use at the cabinet (locally) or at the control point (remotely)

### ACTIVATION CONTROLS

Our VHF and UHF radio narrow-band control packages feature Whelen protocol COMM/STAT™ and include the following:

- Radio
- Radio interface
- Tone or digital squelch
- 3-5 dB gain omni-directional antenna with bracket
- 35' (10.67m) of RG58 antenna cable
- Polyphaser
- **SI TEST®**
- Low battery alarm (two-way only)

Other features are dependent upon one or two-way controls. Whelen equipment can be interfaced with many different types of two-way radio communications products and systems, from ACE, MOSCAD and FSK.

The following is available as standard options.

**BLUE BOLD** indicates the Whelen Model:

### ONE-WAY CONTROLS

- **AUXIN** – Auxilliary board for contact closure activation
- **D2030LL** – 10 digit DTMF Landline
- **D2030NV** – 10 digit DTMF VHF High-Band Narrow-Band / 138-174MHz
- **D2030NU** – 10 digit DTMF UHF Narrow-Band / 450-470MHz
- **WPSTT** – Two-tone sequential option (one-way radio package must be ordered from above options)

### TWO-WAY CONTROLS

- **AUXCS** – Two-way contact closure activation and status board
- **C2030LL** – Two-way landline activation
- **C2030NV** – 10 digit DTMF VHF High-Band Narrow-Band / 138-174MHz
- **C2030NU** – 10 digit DTMF UHF Narrow-Band / 450-470MHz

### OPTIONS

- **PGINT** – Paging interface
- **INTRUWPS** – Intrusion Alarm

### SPEAKER OPTIONS

- **WS15T** – Wide-angle, 15 watt speaker
- **WS15TR** – Recess mount, 15 watt speaker
- **WS15TEN** – Recess mount, 15 watt speaker with grille
- **WS30T** – Wide-angle, 30 watt speaker
- **WS60T** – Wide-angle, 60 watt speaker
- **WSXPL60T** – Explosion-proof, 60 watt speaker
- **WS100** – Wide-angle, 100 watt speaker
- **WS100TCH** – Wide-angle, 100 watt speaker with weatherproof housing

All of the above speakers (except WS100) include level adjustment multi-tab transformers and a capacitor for line level supervision.



IPS1600 Type II  
Electronic Cabinet

# IPS1600



## Specification Data

### PHYSICAL DATA

**Height:** 60.5" (154cm)  
**Width:** 33.2" (84cm)  
**Depth:** 12.0" (30.5cm)

### ELECTRICAL DATA

**AC Input:** 120 / 240V, 60Hz, 7A fuse  
**DC Output:** 28VDC @ 5 amp.  
**Power Amplifier:** 1600 watts total from 4 amplifiers with 4 output channels per amplifier @ 100 watts per channel  
**Tone Generation:** 6 warning signals, standard  
**Public Address:** Standard

### ORDERING INFORMATION

**Basic System includes the following:**

- **IPS1600** – Electronics cabinet including voice board for 1-28 pre-recorded messages
- Speakers:**
- **WS15T** – Wide-angle, 15 watt speaker
- **WS15TR** – Recess mount, 15 watt speaker
- **WS15TEN** – Recess mount, 15 watt speaker with grille
- **WS30T** – Wide-angle, 30 watt speaker
- **WS60T** – Wide-angle, 60 watt speaker
- **WSXPL60T** – Explosion-proof, 60 watt speaker
- **WS100** – Wide-angle, 100 watt speaker
- **WS100TCH** – Wide-angle, 100 watt speaker with weatherproof housing

**OPTIONS:**

- **AUXIN** (one-way) / **AUXCS** (two-way) – Auxiliary boards for contact closure activation
- **D2030LL / D2030NV / D2030NU** – One-way controls
- **C2030LL / C2030NV / C2030NU** – Two-way controls
- **WPSTT** – Two-tone sequential
- **PGINT** – Paging interface
- **INTRUWPS** – Intrusion alarm (two-way only)
- **MSGPROG** – Custom pre-recorded messages
- **MSGPROGL** – Whelen Library messages
- **WPSNCMIC** – Microphone for Public Address use at the cabinet

### MASS NOTIFICATION PRODUCTS

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### SPEAKER OPTIONS



#### WS15T / WS30T

Weatherproof, 15 or 30 watt re-entrant loud speakers with multi-tapped, line matching transformers for output adjustment. Includes mounting bracket for vertical or horizontal installation.



#### WS15TR / WS15TEN

15 watt re-entrant loud speakers with multi-tapped, line matching transformers for output adjustment. Ideal for recessed mounting applications.



#### WS100 / WS60T

Heavy-duty 60 or 100 watt re-entrant loud speaker with wide-angle horn. Mounting bracket is included for vertical, horizontal or stacked installations.



#### WS100TCH

Heavy-duty, waterproof, 100 watt wide-angle re-entrant loud speakers with multi-tapped, line matching transformers for output adjustment. Rugged cast aluminum housing. Includes mounting bracket for horizontal or vertical installations.



#### WSXPL60T

For explosive or combustible atmospheres. 60 watt re-entrant, wide-angle loud speaker features a heavy-duty cast aluminum housing. Includes mounting bracket for horizontal or vertical installations, and multi-tapped line matching transformer. Specify environment by Class and Group when ordering.

### A SYSTEM APPROACH

A facility has two main control centers monitoring plant operations. One plant area is used for light manufacturing and office operations. This requires many low powered speakers allocated over several zones. The second plant area includes heavy manufacturing with high ambient noise levels and requires powerful speakers and visual alerting. In this area alarms may also require local activation. The system diagram below illustrates one solution for the application.

