

# Towed Pinger Locator 25 Specifications



## FEATURES

The Phoenix Towed Pinger Locator 25 (TPL-25) System provides the capability to detect and locate emergency relocation pingers on downed aircraft to a maximum depth of 6,000 msw anywhere in the world. Commercial aircraft pingers are mounted directly on the flight recorder, the recovery of which is critical to an accident investigation.

The system consists of the tow fish, tow cable, winch, hydraulic power unit, generator, and topside control console, although not all of these components are required on every mission. The tow fish carries a passive listening device for detecting pingers that automatically transmit an acoustic pulse. Most pingers transmit every second at 37.5 kHz, although the TPL can detect any pinger transmitting between 3.5 kHz and 50 kHz at any repetition rate.

## SPECIFICATIONS

### Subsea Unit

Weight in Air: 64 lb / 29 kg  
Length: 28 in / 712mm  
Width: 36 in / 914mm  
Height: 18 in / 457mm  
Max Operating Depth: 6,000 msw

### Topside Link

Any tow cable with 2 conductors (ideally coax)  
Max Cable length: 18,000m / 55,000 feet  
Ports: Telemetry: Subconn MCBH8M  
Pinger: Subconn MCBH3M

### Topside Unit

Control Unit: Standard 4U, 19" Rack Mount  
Transit Case Dim.: 21" (533mm) W x 26" (660mm) D x 10.75" (273mm)T  
Weight: 63.5 lb / 28.8 kg  
Power Input: 110VAC-230VAC 50/60Hz  
Power Consumption: 45w  
Outputs: Unfiltered Hydrophone, Filtered Hydrophone  
Speaker, Headphones (x2)  
Indicators: Power Supply Status  
Data Link  
Towfish Telemetry  
Current and Voltage Monitoring

### Offices

9301 Largo Drive West  
Largo, MD 20774

375 Hwy. 182  
Bayou Vista, LA 70380

10111 Richmond Avenue  
Suite 310  
Houston, TX 77042

5409 Beamon Road, Suite B  
Norfolk, VA 23513

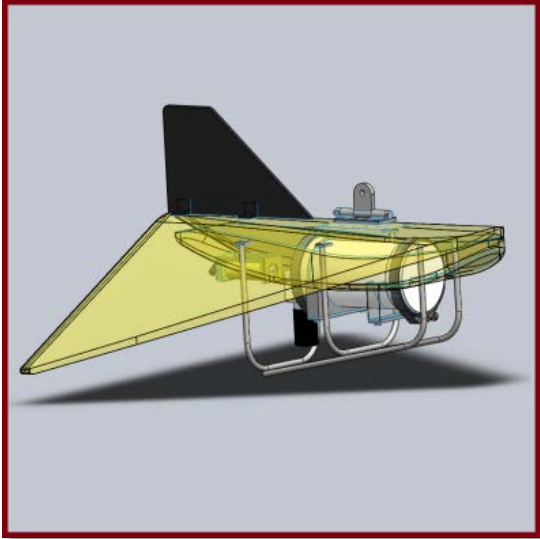
5334 Banks Street  
San Diego, CA 92110

96-1383 Waihona Street  
Pearl City, HI 96782

### Point of Contact

Pete LeHardy  
plehardy@phnx-international.com  
Office: 301.341.7800  
Fax: 301.499.0027





### Towfish Telemetry

3 Axis Compass Module (Pitch, Roll, Heading)  
 Internal Temperature  
 Pressure Sensor Input.  
 Data Update every 0.5 seconds

### Pressure Transducer

Full Scale Pressure: 10,000 psi  
 Accuracy:  $\pm 0.25\%$  Full Scale  
 Proof Pressure: 30,000 psi

### Hydrophone

Type: Hemispherical pattern passive  
 Frequency: 1.0 to 50 kHz  
 Sensitivity: -175 to -180 dB re 1v/upa

### Subsea Environmental Filter

Type: Selectable (HF / LF) 16th Order  
 LF Band: 3kHz to 9 kHz  
 HF Band: 25kHz to 50kHz  
 None: Option to Bypass for non-standard frequencies

### Self Test / Emergency Pinger

Type: Teledyne Benthos Model #: ELP-362A/PL  
 Frequency: 37.5 kHz,  $\pm 1$  kHz  
 Operating Depth: 0 to 6,000 msw  
 Pulse Length:  $\geq 9$  ms  
 Repetition Rate:  $\geq 0.9$  pulses per second

### Console Filter Bands

3.5 kHz: Passband 2 kHz to 4.5 kHz  
 8.5 kHz: Passband 6.5 kHz to 10.5 kHz  
 27 kHz: Passband 25 kHz to 29 kHz  
 37.5 kHz: Passband 35.5 kHz to 39.5 kHz  
 45 kHz: Passband 43 kHz to 47 kHz  
 None: All frequencies passed

### Detection Range (For Dukane Model #N15F210B)

Max. Range: Greater than 3km

