Easytrak Alpha
USBL System,
Model 2665

Key features

- Compact USBL system
- Rapid deployment
- Simple to use
- Cost-effective

Easytrak Alpha Overview

Easytrak Alpha is the compact, carry on version of the applied acoustics’ range of lightweight USBL tracking systems that use a vessel mounted transducer array to calculate the position of a subsea target equipped with an acoustic beacon.

Quick to deploy the Alpha Portable USBL system is ideally suited for small subsea vehicle operations or diver tracking.

Alpha Portable Technical Specification

EASYTRAK ALPHA, MODEL EZT-2665

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Console: 255 x 60 x 315mm, excluding cables</th>
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</thead>
<tbody>
<tr>
<td>Weight</td>
<td>Console: 2.6kg approx</td>
</tr>
<tr>
<td>Power Supply</td>
<td>Input: 115Vac – 230Vac 47–63Hz typically 2A</td>
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<tr>
<td></td>
<td>Console Input: 12-18Vdc up to 2A depending on input dc voltage</td>
</tr>
<tr>
<td>Communications</td>
<td>2 x RS-232 (1) External GNSS + Heading and (2) Data Out</td>
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<tr>
<td></td>
<td>1 x GNSS Antenna Connector</td>
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<td>All RS232C inputs comply with EIA (Electronics Industry Association) RS232C standard.</td>
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<tr>
<td></td>
<td>1 x USB connection to external PC</td>
</tr>
<tr>
<td>Internal GNSS Receiver</td>
<td>SiRF Star III Chipset Receiver</td>
</tr>
<tr>
<td></td>
<td>&lt;10m, 2D RMS</td>
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<tr>
<td></td>
<td>&lt;5m 2DRMS, SBAS (WAAS, EGNOS, MSAS...) corrected</td>
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</table>
External GNSS/Heading

GNSS NMEA messages: GGA and RMC
Heading NMEA messages: HDT, HDG, HDM

Data Output

AAE, TP-EC W/PR, $PSIMSSB, $PSIMSNS, $GPRMC,
Sonar SSS - $GPGGA (Vessel position),
$GPVTG (Vessel track and speed)
$GPTLL (Target position)
Data logging to HD

Beacon types

Transponders and Responder (1)

Channels

4 displayed from 35 pre-defined channels

Interrogation interval

1, 2, 4 or 8 second intervals

Responder output

Positive 12V pulse 5ms long. BNC connector

Operating temperature

−5 to 30°C

Storage temperature

−5 to 45°C

**TRANSDUCER, TYPE ETM 904C**

**Dimensions**

Transducer: 291mm long x 78.5mm diameter

**Weight**

Transducer: 3.84kg in air, 3.0kg in water approx
Transducer housing material: A4 stainless steel

**Depth rating**

30m

**Operating Temperature**

−5 to 30°C

**Storage Temperature**

−5 to 45°C

**Accuracy/Performance**

**Slant Range Resolution**

10cm

**Position Accuracy**

2.0° RMS, 3.0% of slant range. Excluding effects due to GPS error, incorrect VOS, ray bending, compass, pitch and roll effects, and acceptable S/N ratio

**Transducer**

MF frequency band

**Transducer beam pattern**

Hemispherical

**Interrogate SPL**

Typically 186 re. 1μPa@1m

**Heading Sensor Accuracy**

<0.5° RMS

**Tilt Sensor Accuracy**

Accuracy ± <1.0° RMS Range ± 80°