



: Technical Specification

Easytrak Alpha Portable

The Easytrak Alpha Portable is the introductory and most compact version of the Applied Acoustics' range of USBL tracking systems. Quick to deploy, it is ideally suited for small subsea vehicle operations or basic diver tracking.

At the heart of the system is the Alpha Portable console, a yellow marine grade splash-proof case containing all the electronics for the USBL system, including internal GPS, a full size keyboard, large LCD display and built-in battery. Transponders and responders are supported through a number of pre-defined channels, with switchable interrogation.

The system's lightweight transducer incorporates heading and tilt sensors and offers hemispherical tracking making it ideal for shallow water applications. The transducer cable is pre-moulded to the transducer, removing the need for a separate connector.

As with all Easytrak systems, the integral features can be disabled, and peripheral equipment can be added using the external serial and USB ports.



Model 2655 Alpha Portable with 903C Transducer

Key Features

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

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Easytrak Alpha Portable Model 2655

Dimension	Console: 411(W) x 323(D) x 168(H) mm, excluding cables
Weight	6.0 kg approx
External Power Supply	Input: 115V AC - 230V AC 47-63Hz typically 2A Output: 18V DC up to 4A depending on input DC voltage
Battery Life	2-3 hours from built-in battery pack Auxiliary Battery Pack Available
Display	Colour LCD 10.4 inch display (diagonal) Active area, 211.2 x 158.4 mm
Input Control	Full QWERTY keyboard with integrated mouse
Communications	2 x RS232 External GPS and Data Out 1 x USB Port GPS Antenna connector
Internal GPS / DGPS	SiRF Star III Chip set Receiver <10m, 2D RMS <5m 2DRMS, SBAS (WAAS, EGNOS, MSAS...) corrected
External GPS / DGPS Input Data Output	NMEA; GLL, GGA, RMC AAE, TP-EC W/PR, \$PSIMSSB, \$PSIMSNS, \$GPRMC, Sonar SSS -\$GPGGA (Vessel position), \$GPVTG (Vessel track and speed) \$GPTLL (Target position)
Beacon Types	Transponders (2/3) and Responder (1)
Channels	32 pre-defined channels
Interrogation Interval	1, 2, 4 or 8 second intervals
Responder Output	+12V pulse 10ms long
Operating Temperature	-5 to 30°C
Storage Temperature	-5 to 45°C

ETM903C Transducer

Dimension	Transducer: 370mm long x 100mm diameter Cable: 12.5mm diameter, yellow polyurethane sheathed Standard length is 20m
Weight	Transducer: 4.6kg in air, 2.6kg in water approx Transducer housing material: PVC
Depth Rating	20m
Operating Temperature	-5 to 30°C
Storage Temperature	-5 to 45°C

Accuracy / Performance

Slant Range Resolution	10cm
Position Accuracy	2.0° RMS, 3.5% 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 power	Typically 186dB re. 1µPa@1m
Heading Sensor Accuracy	<0.5° RMS
Tilt Sensor Accuracy	Accuracy ± <1.0° RMS Range ± 80°

