ODOM

ES3™

odom

HYDROGRAPHIC SYSTEMS

ES3 – MULTIBEAM ECHO SOUNDER

Disruptive Innovation! The completely new hydrographic multibeam system from Odom almost defines the term. The ***ES3*** is aimed squarely at the user who previously felt that multibeam technology was beyond his means due either to high costs or perceived complexity. Affordability previously meant too many compromises on performance and performance always carried a high price tag. With the introduction of the ***ES3*** both performance and return on investment are served in one affordable and easy to use package! Disruptive innovation – now within reach of every potential multibeam user – the ***ES3*** from Odom!

ES3 General Specifications

Frequency:
- 240 kHz

Swath Width (Nominal Beam Geometry):
- 120° x 3° Transmit
- 120° x 3° Receive

Effective Beam Widths*:
- Narrow – 0.75°
- Medium – 1.5°
- Wide – 3.0°

Number of Beams**:
- Default – 480
- Selectable – 240, 120

Range Resolution:
- 0.2% of Range

Range:
- 60m (197ft.) water depth
- 100m (328ft.) slant range

Minimum Detectable Range:
- 0.5m below transducer

Ping Rate (PRF)
- 12 Hz at 20m range (Processor and # of real-time beams selected dependent)

Maximum Operating Depth (submersion depth):
- 100m

Interface to PC:
- Ethernet (10 base-T) using TCPIP

Maximum Cable Length:
- 100m using CAT5-e

Connector:
- Underwater wet-mateable 8 conductor Subconn at transducer end, 8 pin Circular MS type connector at J-Box end 15m (50 ft) cable.

Power Supply:
- 24 VDC nominal (9 to 30 VDC range with J-Box)
- Power Dissipation <25 Watts total

Dimensions:
- 193mm (7.86”) L, x 162mm (6.38) H, x 92mm (3.63) W

Weight:
- 8 kg (18lb) in air

Material:
- Stainless Steel

Power/Data Interface J-Box: (Included in ES3 scope of supply)
- Three (3) port Ethernet switch (ES3, Data Acquisition PC, and spare)
- 9 to 30 VDC input range

* Effective Beam Widths include some overlap between adjacent beams.
** Acoustic data is collected at full resolution for off-line playback/display. While the number of beams displayed and output in real time is operator selectable, the number selected affects the system Ping Rate (PRF) inversely.