

ODOM  
**ES3**<sup>TM</sup>



**odom**  
HYDROGRAPHIC SYSTEMS



**ES3 –  
MULTIBEAM  
ECHO SOUNDER**

# ODOM ES3™

Multibeam technology is now within reach of everyone. Our new ES3 Multibeam Echo Sounder provides much of the performance of larger, more expensive systems in an extremely small, easy to use and affordable package. With the introduction of the ES3, both performance and return on investment are served in one affordable and easy to use package!

*Buy Odom – invest in your peace of mind.*

## 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

- 0.02% of Range

### Real-time Beam Steering on the Roll Axis (Roll compensation)

- TSS1/EchoSounder String Required

### Range

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

### Minimum Detectable Range

- 0.5 m (1.6 ft.) below transducer

### Ping Rate (PRF)

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

### Maximum Operating Depth (Submersion depth)

- 200 m (656 ft.)

### Interface to PC

- Ethernet (10 base-T) using TCPIP

### Maximum Cable Length

- 100 m (328 ft.) using CAT5-e, longer cable runs possible with additional hardware

### Connector

- Underwater wet-mateable 8 conductor Subconn at transducer end, 8 pin Circular MS type connector at P/DI end

### Power Supply

- 24 VDC nominal (9 to 30 VDC range with P/DI)
- Power Dissipation <25 Watts total

### Dimensions – Sonar Head

- 162 mm (6.3 in.) L x 117 mm (4.62 in.) H x 92 mm (3.63 in.) W

### Weight

- 8.2 kg (18 lb.) in air

### Material

- Stainless steel housing
- Urethane acoustic window

### Power Data Interface "PDI" (Included in ES3 scope of supply)

- Three (3) port Ethernet switch (ES3, Data Acquisition PC, and spare)
- 9 to 30 VDC input range
- Dimensions: 178 mm (7 in.) W x 102 mm (4 in.) H x 178 mm (7 in.) D

### Ping Rate (PRF) Example

- 14 Hz
- 20 Meter Range
- Roll Compensation ON
- 120 Beams
- Points and Intensity Display
- Panasonic CF-52 Notebook PC

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



Control / Processor PC

Power / Data Interface

ES3 Sonar Head



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