# FlowQuest 75

## Ultra Long-range Acoustic Current Profiler



- Range Up To 900 Meters
- 75 kHz Operating Frequency
- Highly Robust Acoustic Doppler Technology
  - **Significantly Longer Range When Compared Against Similar Products**
- Highly User Friendly And Cost Competitive
- Standard Depth 800 Meters
- Optional Depth 1500, 3000 or 6000 Meters
- Data Fusion Function To Interface To Multiple Third Party Sensors
- Integrated LinkQuest High Speed Acoustic Modem
- Low Power Consumption DSP Technology

FlowQuest 75 is an ultra long-range Acoustic Current Profiler manufactured by LinkQuest Inc., a company renown for its innovation, capability and product quality. The FlowQuest 75 current profiler is ideal for measuring currents and flows in deep oceans. With its capability for significantly longer range, and seamless integration with third-party sensors and LinkQuest acoustic modems, the FlowQuest system is not just a current profiler. It also serves a focal point for your deepwater deployments.





### **Acoustic Current Profiler Specifications**

#### Water Profiling Range and Depth

Frequency	75 kHz
Maximum Range	900 m
Maximum Cell size	32 m
Standard Depth	800 m
<b>Optional Depth</b>	1500, 3000 or 6000 m
<b>Maximum Transmit</b>	800 watts
<b>Blank Distance</b>	3.8 m

### **Standard Sensors**

#### **Temperature:**

Accuracy: ±0.4℃ Range: -5°C to 45°C

Tilt:

Range: -15° to 15° Accuracy: ±0.5°

**Compass:** 

Accuracy: ±2° Maximum Tilt: ±15°

#### **Velocity Specifications**

Accuracy	$\pm 1\% \pm 5 \text{ mm/s}$
Cell size	4 – 32 m
<b>Maximum Water Velocity</b>	20 knots
Number of Cells	170
<b>Maximum Ping Rate</b>	1/second

#### Software

Windows FlowQuest Software for real-time current monitoring and off-line data analysis and display.

#### Hardware

**Transducer:** 4 Beam Convex

Transducer Beam Angle: 22 degrees

Housing: Anodized Aluminum Communication: RS422 or RS232

**Internal Compact Flash Card:** 1 Gbytes (standard)

2 or 4 Gbytes (optional)

#### Weight and Dimension

Frequency	75 kHz
Transducer Assembly Diameter	58 cm
<b>Housing Diameter</b>	20 cm
Overall Length	47 cm
Weight In Air	40 kg
Weight In Water	26 kg

(Based on a unit with no internal battery pack. Length and weight change with internal battery packs.)

#### **Options**

#### **Data Fusion Function**

Interface to and log data from up to 7 third-party instruments such as CTD, precision depth sensor, water quality monitoring instruments, nutrition and chemical analyzers through RS232 serial ports. Sample up to 16 analog inputs simultaneously.

#### **High Speed Acoustic Modem**

Seamlessly integrated with LinkQuest high speed underwater acoustic modem (up to 38400 baud) for real-time monitoring or periodic data collection.

