



## SS-01

*Low-Power Network-Ready Sonar*

Affordable

Proven Reliable

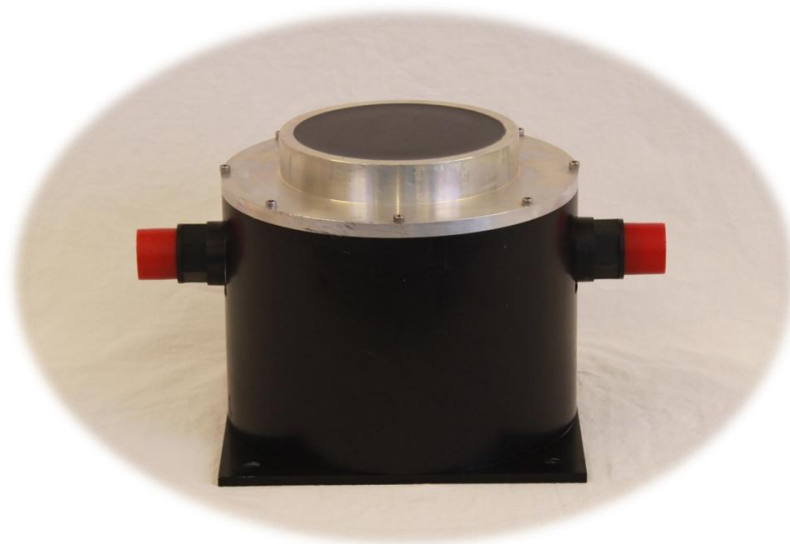
Low Power

Minimal Monitoring

Modular

Highly Portable

Rugged



SciFish Model SS-01 sonar is a low-power, rugged, and highly portable system originally designed to be deployed in remote Alaska to count the abundance of smolt migrating down a river. It supplements or replaces hand or net counting and allows for continuous monitoring. SS-01 is an upward looking, single beam, narrowband transducer sonar system. The system gets power and stores data via custom underwater cables to a terminal box. Each sonar pod has a custom electronic circuit board designed for power distribution and signal conditioning.

The Model SS-01's low power consumption only requires daily recharges, leaving more time for other tasks. It is cost-effective, needing minimal monitoring by any technician or biologist. Real-time backup ensures no data loss. System can be accessed at any time to get counts when needed. Modular design allows customized fit to any river system using a simple shore-based deployment. Echoview software provides proven analysis and reporting.

With several years of successful deployment in the harsh climates of Alaska, this system has demonstrated the reliability and accuracy needed for a wide range of related applications including: monitoring fish behavior near turbines, dams, barriers, or industrial structures to ensure fish safety and distances maintained between structures and fish. The low cost, modular design of the system makes it ideal for integration in offshore wind and tidal energy projects.

### Washington Office

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### Alaska Office

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## Specifications

Operational Range	1 - 25 meters
Ping Rate	2 – 25 pings per sec
Transducer Type	Single beam
Transducer Beam Shape	Conical
Transducer Beam Width	7 deg
Maximum pods per system	Determined by duty cycle and network bandwidth: <ul style="list-style-type: none"><li>• At least 25 with 100 Mbit network</li><li>• Over 100 with Gigabit network</li></ul>
Terminal Box	Combines up to 9 pods for analysis and provides network power and laptop interface
Power source	External 12 VDC
Power Consumption per pod	7 Watts
Power Consumption per system (9 pods + terminal box)	80 Watts
Communication interface	TCP/IP 100Mb/sec
Storage type	External NAS
Storage size	1 or 2 TB
Weight	15 lbs in air
Maximum Pod Dimensions	12" x 9" x 7.625"
TX Power	200 Vpp
TVR	160 dB re 1 $\mu$ Pa / Vrms
OCVR	-170 dB re 1 Vrms / $\mu$ Pa
Embedded Computer	ARM TS-7260
Gain	27 dB

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