



Communications Buoy

INNOVASEA

Innovasea's Communication Buoy is used to collect meteorological and water quality data and transmit that information to the cloud in real time.

The buoy collects data from Innovasea's wireless aquaMeasure sensors, a Doppler current profiler and meteorological sensors to provide up-to-date information on conditions at the farm. This information can be viewed in real time on a smartphone, tablet or PC using Innovasea's precision aquaculture platform, RealFish Pro.

Key Component Characteristics

Power	4 100W-12V solar Panels
	MPPT regulator
Batteries	4 108Ah-12V sealed lead acid
	40A charge controller
Lantern	Solar with 17 Ah Battery
Doppler Current Profiler	Nortek Aquadopp Z-cell, 600 kHz
Wave Height Sensor	SeaView Systems SVS-603
Weather Station	AirMar 200WX
Wind Speed	0 to 40 m/s (0.1 m/s resolution)
Wind Direction	0 to 360 deg (0.1 deg resolution)
Pitch / Roll	+/- 50 deg (<1 deg resolution)
Air Temperature	-40 C to 55 C (0.1 C resolution)
Barometric Pressure	300 to 1100 mbar (0.1 mbar resolution)
Relative Humidity	10 to 95%
GPS Accuracy	3 m



Buoy, General Characteristics

Float Vol	5610 L
Freeboard	780 mm
Reserve Buoyancy	1475 kgs
Maximum Mooring Load	1475 kgs
Draft, Maximum	960 mm
Freeboard, Minimum	510 mm
Safe Working Load, 1pt	1950 kgs
Safe Working Load 2pt	5200 kgs
Submergence	54.7 kg/cm
Visual Area	4.0 sq. m

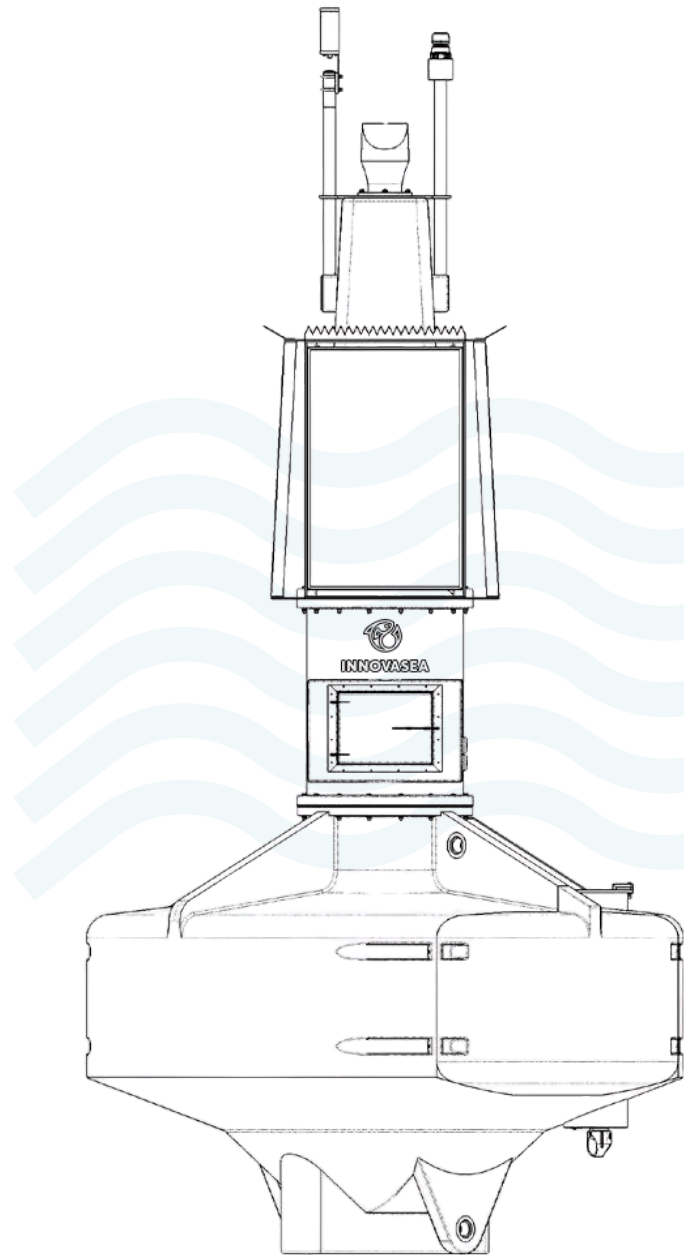


Buoy, Physical Characteristics

Material	Rotationally molded, UV-stabilized virgin polyethylene; 316-grade internal tie bars, lifting and mooring eyes
Wall Thickness	18 mm
Ballast	400 kg
Filling	Closed-cell polyurethane foam
Height	5020 mm
Width	2600 mm
Mass	970 kg
Radar Reflector	Echomax
Certifications	IALA E-108; ISO9001:2008

Telemetry

Range	20 km
Data Rate	0.7 to 16.5 Mbps
Direction	360 degrees
Operating Band	4900 – 5900 MHz
Bandwidth	20 MHz
Tx Power	Up to 2 W
Antenna Gain	7dBi
Antenna Elements	4



Who we are

Fueled by a commitment to a more sustainable future, Innovasea is at the forefront of pioneering technologies that transform our industry, protect the oceans, and feed our world. We deliver fully integrated solutions, backed by a team of experts, to ensure users get the most out of their equipment. Together, this work advances our mission of blending innovation with environmental stewardship and global advocacy.

