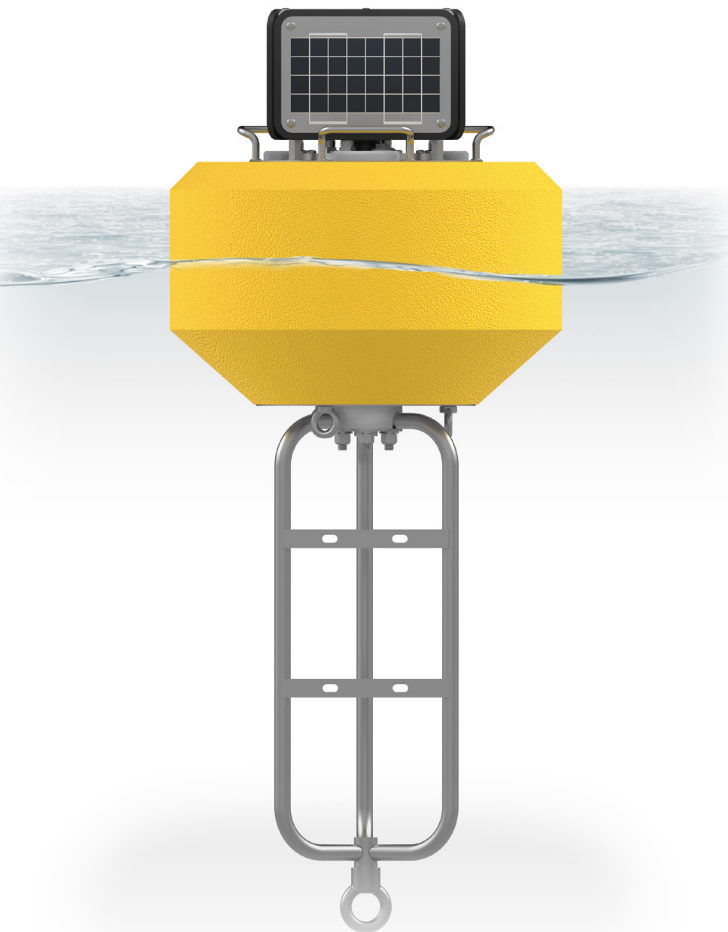


CB-75-SVS

WAVE BUOY

- Integrated SVS-603HR wave sensor
- 4G LTE or Iridium satellite telemetry options
- Supports a variety of environmental sensors
- Autonomous battery & solar power
- Rugged polymer-coated foam hull



The **CB-75-SVS** Wave Buoy offers the latest in real-time wave observations in a compact, affordable, and easy to deploy platform. At 21" (53.34cm) hull diameter and 40 lb. (18.14kg) weight, it's ideally suited for tethered moorings. The buoy accurately measures wave height, period, direction, and more using SeaView Systems' industry-leading **SVS-603HR** sensor, relied upon in buoy networks by NOAA and many others throughout the world. External sensor ports with wet-mate connectors support GPS, meteorological, and water quality sensors for maximum flexibility.

The buoy is constructed of an inner core of cross-linked polyethylene foam with a tough polyurea skin. A rechargeable battery with integrated solar panels powers the wave buoy continuously, and all electronics are housed in a quick-removable waterproof package with wet-mate connectors. A removeable instrument cage serves as counter-ballast and supports instrument mounting, while three 1.5" (3.81cm) pass-through holes facilitate cable routing of underwater sensors.

Available with integrated 4G LTE or Iridium satellite communications, the **CB-75-SVS** Wave Buoy sends data in real-time to the cloud-based **WQData LIVE** datacenter. In the Basic tier, this free service allows users to securely access and analyze data, as well as share data through an auto-report. Subscription-based tiers of **WQData LIVE** are also available for generating custom alarms, exporting data through an API or custom NDBC/GLOS formats, and providing a publicly-accessible version of the project website.



CB-75-SVS

WAVE BUOY

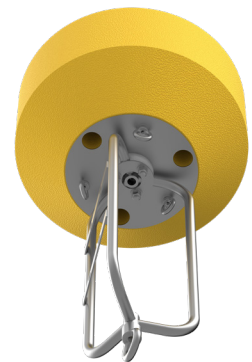
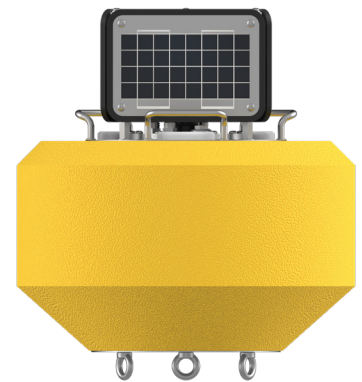
specifications

Wave Sensor	SeaView Systems SVS-603HRI
Parameters	Hs Wave Height (Significant Wave Height), TP (DPD) Wave Period, Dominant Wave Direction, Mean Wave Direction (MWD), Te Energy Period, RMS Tilt Angle, Max Tilt Angle
Range	Wave Height: 0.2-20m; Wave Period: 1.5-20 seconds; Wave Direction: 0-360°
Resolution	Wave Height: 0.001m; Wave Period: 0.001 seconds; Wave Direction: 0.001°
Accuracy	Wave Height: +/- 0.5cm; Wave Period: <1%; Wave Direction: +/-2°
Buoy	NexSens CB-75
Hull Outer Diameter	21" (53.34cm)
Hull Height	13" (33.02cm)
Pass-Through Hole Diameter	1.5" (3.81cm)
Tower Height	8.2" (20.83cm)
Solar Panels	3x 4-watts
Weight	40 lb. (18.20kg)
Net Buoyancy	75 lb. (34.00kg)
Hull Material	Cross-linked polyethylene foam with polyurea coating & stainless steel deck
Hardware Material	316 stainless steel, 304 stainless steel (lifting handles)
Tethering Attachments	3x 3/8" eye nuts
Data Logger	NexSens X3-SVS
Operating Temperature	-40°C to 70°C
Rating	IP68
User Interface	RS-485 to CONNECT Software via USB adapter; WQData LIVE Web Datacenter with optional wireless telemetry; Status beeps
Data Logging	8 MB non-volatile flash memory (6 MB available)
Real Time Clock (RTC)	<30sec/month drift ¹ ; Auto-sync weekly ² ; Internal backup battery
Log Interval	User configurable from 5-minute (20-minute default) ³ ; Unique interval per sensor
Transmission Trigger	Time-based; Selective parameter upload option
Sensor Power	(2) independent switches from input supply ^{4,5}
Built-in Sensors	Temperature (-40° to 100°C, 0.016°C resolution, ±0.3°C accuracy); Humidity (0% to 100%, 0.03% resolution, ±4% accuracy from 5 to 95% RH & -20 to 70C); Battery voltage; System current
Sensor Ports	(2) MCBH-8-MP for sensor interface (RS-232, RS-485, SDI-12, Switched Power, GND)
Power Port	(1) MCBH-6-FS for power and communication (12V Solar In, Power Switch, RS-485 Host, GND)
Telemetry Options	4G LTE global cellular; Iridium satellite
Antenna Port	Type N female

¹Assumes 25°C operating temperature; ²Requires the X3 to be connected to the internet; ³Minimum log interval dependent on sensor limitations and processing time; ⁴Cumulative concurrent current limit of all three channels is 2A; ⁵Logger power supply must be able to support current requirements of sensors

parts list

Part #	Description
CB-75-SVS	CB-75-SVS wave buoy
CB-75-SVS-4G	CB-75-SVS wave buoy with global 4G LTE cellular telemetry
CB-75-SVS-IR	CB-75-SVS wave buoy with Iridium satellite telemetry
MCIL6MP-USB-DC	Direct connect USB PC cable with external 12VDC power adapter, X3-SUB & X3-SVS
M550-F-Y	Solar marine light with flange mount & 1-3 nautical mile range, 15 flashes per minute, yellow
CB-ZA	Sacrificial zinc anode for CB-Series data buoys



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