CB-25-SVS

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



The CB-25-SVS Wave Buoy by NexSens Technology offers the latest in real-time wave observations in a compact, affordable, and easy to deploy platform. At 18" hull diameter and less than 30 lb. (13.6kg) weight, it can be used for drifting, tethering or mooring applications. 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 power the wave buoy continuously, and all electronics are housed in a quick-removable waterproof package with wet-mate connectors. Three 1.5" pass-through holes facilitate cable routing of underwater sensors.

Available with integrated cellular or Iridium satellite communications, the CB-25-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.

Powered by SeaView Systems SVS-603HR

CB-25-SVS

specifications

Wave Sensor	SeaView Systems SVS-603HRi
Available Wave Parameters	Significant wave height, dominant period, wave direction, mean wave direction and more
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°
Diagnostic Sensors	Internal temperature (-40C to 85C, 0.1C resolution, $\pm 0.3C$ accuracy); Humidity (0% to 100%,
	0.1% resolution, ±4% accuracy from 5 to 95% RH & -20 to 70C); Battery voltage
Optional Water Sensors	Surface temperature, single-parameter sensors, multi-parameter sondes
Optional Atmospheric Sensors	Single and multi-parameter weather sensors
Optional Position Sensor	Marine GNSS receiver or standalone asset tracking device
Sensor Interfaces	SDI-12, RS-232 (2 channels), RS-485
Sensor Ports	(2) External sensor ports, expandable using splitters
Battery	12 VDC sealed lead acid (SLA) battery, 6.0 A-Hr
Solar Power	(3) 4-watt 12 VDC solar panels
Serial Interface	Direct RS-485 via USB adapter (for setup)
Wi-Fi Interface	802.11b/g/n (for setup)
Cellular	2G/3G, 4G LTE (North America) & CAT-M1/NB2 LTE
Iridium Satellite	Short Burst Data (SBD) 1616 MHz to 1626.5 MHz
Cloud Datacenter	WQData LIVE web portal with auto data export to NDBC, GLOS, and others
Data Logging	256MB microSD card (expandable up to 32GB)
Hull Dimensions	18" (45.72cm) outside diameter; 11" (27.94cm) tall
Tower Dimensions	8" (20.32cm) tall, triangular
Center Hole Dimension	5.5" (13.97cm) inside diameter
Weight	30 lbs. (13.61 kg)
Net Buoyancy	25 lbs. (11.34 kg)
Hull Material	Cross-linked polyethylene foam with polyurea coating & stainless steel deck
Hardware Material	316 stainless steel
Mooring Attachments	(4) 3/8" eye nuts
Operating Temperature	-20C to 70°C
Warranty	12 months. See terms at nexsens.com/support/warranty
Place of Manufacture	Ohio & Michigan, USA
Field Verification	Tested and verified by LimnoTech, Ann Arbor, MI

parts list

Part # Description CB-25-SVS CB-25-SVS wave buoy CB-25-SVS-C-2G3G CB-25-SVS wave buoy with 2G/3G cellular telemetry CB-25-SVS-C-NA4G CB-25-SVS wave buoy with North American 4G LTE cellular telemetry CB-25-SVS-C-CATM CB-25-SVS wave buoy with CAT-M1/NB2 LTE cellular telemetry CB-25-SVS-I CB-25-SVS wave buoy with Iridium satellite telemetry Direct connect USB PC cable with external 12VDC power leads, X2-SDLMC & X2-SVS MCIL6MP-USB-DC M550-F-Y Solar marine light with flange mount & 1-3 nautical mile range, 15 flashes per minute, yellow

WAVE BUOY









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