Marin

Surface buoy + ADCP

Real-time, motion-corrected current and wave data from a compact, easily deployable buoy



Marin is Nortek's complete, end-to-end solution for real-time current and wave measurements from a compact, easily deployable surface buoy. With the integrated ADCP and ready-to-use system design, Marin can be deployed and operational from day one, without specialist integration expertise.

Users benefit from real-time data viewing in Nortek's new SeaSense software, making it easy to access current velocities or wave parameters in real time, wherever in the world you are.

Marin's purpose-built, balanced design provides the stability required for quality current profiles, while remaining compact, affordable and easy to use.

Highlights

- ✓ Motion-corrected current velocity profiles
- ✓ Real-time data transmission
- ✓ Balanced form factor for quality current and wave measurements
- ✓ Compact and easy to deploy

Applications

- ✓ Environmental monitoring programs
- ✓ Ports and harbor management
- ✓ Aquaculture operations
- ✓ Scientific research
- ✓ Offshore operations requiring at-a-glance info

Technical specifications

Operating environment	
Water type	Suitable for seawater, freshwater, and brackish water
Operating temperature	-20°C to +60°C
Storage temperature	-20°C to +60°C
Direct sunlight exposure	Tolerant to 10 years aggregated direct sunlight
Operating pressure rating	Equivalent to 2 m depth
Survival pressure rating	Equivalent to 20 m depth

Physical design	
Maximum diameter	50 cm
Maximum height	65 cm
Maximum weight	20 kg, including full battery set
Handling	Designed for single-person handling / deployment

Power system

Solar charging	Solar panel capacity sufficient to keep the battery pack charged during fall/winter at 50° latitude N/S
Solar panels	3 x 9W
Power note	Final sizing depends on total system power consumption and safety margins

Wave measurement performance

Wave height	
Range	0.2 - 20 m
Resolution	TBC
Accuracy	TBC
Wave direction	
Range	0 - 360°
Resolution	TBC
Accuracy	TBC
Wave period	
Range	1 - 30 s
Resolution	TBC
Accuracy	TBC

Current measurement performance

Measurement range	Up to 20 m
Cell size	1 m standard
Accuracy	±1% of measured value ±0.5 cm/s

Heading, Position, and Temperature

Heading	
Range	0 - 360°
Resolution	<0.01°
Accuracy	2°
Position	
Resolution	0.1 m
Accuracy	<5 m
Water temperature	
Range	-4°C to +40°C
Resolution	0.01°C
Accuracy	0.1°C