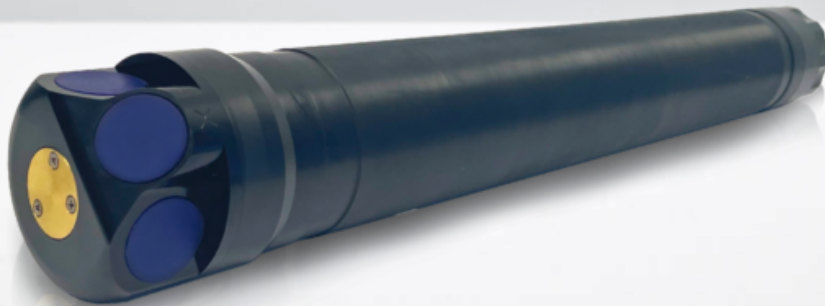


## Aquadopp 2 - 500 m



**NEW!**



### **Highly versatile single-point current meter with the option to perform PUV wave measurements**

The Aquadopp 500 m is a compact, accurate and affordable single-point current meter for applications where a current profile is not needed. Designed for use in several deployment scenarios, from mooring lines to bottom-mounted structures, it also has the option to perform PUV-based directional wave measurements, making it a cost-effective and simple solution.

The Aquadopp now offers 6% broadband measurements and “hibernation mode” between measurements, enabling precise data collection with lower power consumption. Combined with mechanical improvements allowing for more internal battery storage, the modern Aquadopp design extends potential deployment duration.

## Highlights

- ✓ Single-point current meter
- ✓ Perfect for mooring lines
- ✓ Simple pressure-based (PUV) directional wave measurements in shallow water
- ✓ LED blinks when pinging for peace of mind during deployment

## Applications

- ✓ Attached to mooring lines
- ✓ Combined with riser monitoring systems
- ✓ Shallow-water wave and current measurements
- ✓ Studies of tidal currents
- ✓ Near bed current measurements

## Technical specifications

### → Water velocity measurements

Cell size	0.75 m
Maximum number of cells	1
Distance to measurement	1.0-6.0 m (user-selectable)
Velocity range	±1 m/s, ±2.5 m/s, ±5 m/s
Velocity range (horizontal)	±2.3 m/s, ±5.75 m/s, ±11.5 m/s
Accuracy	±1% of measured value ±0.5 cm/s
Horizontal velocity precision (consult instrument SW)	Typ. 1 cm/s
Maximum sampling rate (output)	1 Hz
Wave measurements	PUV (optional)

### → Echo intensity

Sampling	Same as velocity
Resolution	0.5 dB
Dynamic range	90 dB
Transducer acoustic frequency	2 MHz
Number of beams	3 (see GA drawings for angles)
Beam width	0.85° (1.7° total)

### → Sensors

Temperature:	
Temp. range	-4 to +40 °C
Temp. accuracy/resolution	0.1 °C/0.01 °C
Temp. time response	<1 min
Compass:	
Accuracy/resolution	<2° for tilt <30°/0.01°
Tilt:	
Accuracy/resolution	0.2° for tilt <30°/0.01°
Maximum tilt	Full 3D
Up or Down	Automatic detect
Pressure:	
Range	30 m/100 m/500 m
Accuracy/precision	0.5% FS / 0.005% of full scale

### → Digital inputs

No. of channels	1
Digital input format	MicroCat CTD

### → Data recording

Capacity	16 GB
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### → Real-time clock

Accuracy	±1 min/year
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Backup in absence of power	4 weeks
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### → Data communications

I/O	RS-422 (inquire for RS-232)
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Communication baud rate	9600 Baud-1.2 Mbaud (default 115200 Baud)
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User control	Nortek Deployment Software or direct ASCII commands, with binary or ASCII data output
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### → Software

Operating system	Agnostic
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Functions	Deployment planning, instrument configuration, data retrieval and conversion. Online data display
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### → Power

DC input	9-24 VDC
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Absolute maximum DC input	26 VDC
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Maximum peak current	4.5 A
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Power consumption	Consult Nortek Deployment Software
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Sleep current	< 10 uA
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Transmit power	Adjustable
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### → Batteries

Internal battery capacity	1-3 x 50 Wh (Alkaline), 2-3 x 165 Wh (Lithium), 1-3 x 76 Wh (Li-Ion)
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Battery weight	430g per 50 Wh (Alkaline), 380g per 165 Wh (Lithium), 300g per 76 Wh (Li-Ion)
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### → Environmental

Operating temperature	-5 to +40 °C
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Storage temperature	-20 to +60 °C
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Shock and vibration	Shock: IEC 60068-2-27, Vibration: IEC 60068-2-64
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EMC	EN IEC 61000-6-2:2019, EN IEC 61000-6-4:2019
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Depth rating	500 m
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### → Connectors

Bulkhead (Impulse)	MCBH-8-FS Brass
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Cable	PMCIL-8-MP on 5 m (default) polyurethane cable
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### → Materials

Standard model	POM, Naval Brass, Titanium Gr.5, Epoxy
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### → Dimensions (see drawings for details)

Maximum housing diameter	75 mm
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Maximum length	S2VC: 593 mm, S2SC: 634 mm
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### → Weight

Weight in air (without batteries)	S2VC: 2480g, S2SC: 2710g
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Weight in water (without batteries)	S2VC: -150g, S2SC: -50g
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## → Arrangements

S2VC	Shallow water, 2MHz, Vertical orientation, Current meter
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S2SC	Shallow water, 2MHz, Side-looking orientation, Current meter
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