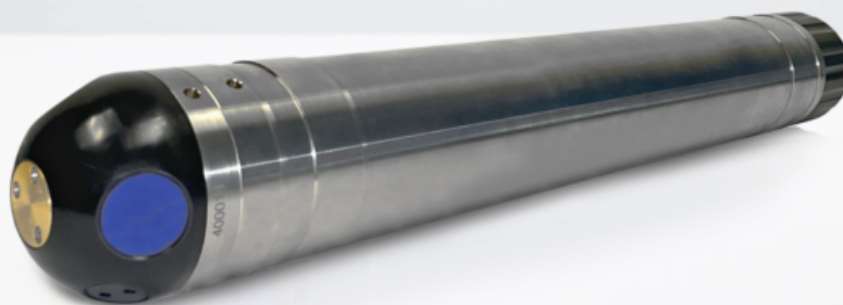


Aquadopp 2 - 6000 m



NEW!



Courantomètre ponctuel grands fonds conçu pour les longs déploiements avec corps en titane

With all the features and capabilities of the standard Aquadopp, the deepwater Aquadopp 6000 m current meter has been used and proven by oceanographers around the world for almost 20 years. Thanks to innovative data diagnostic features for challenging environments, it provides exceptionally high-quality 3D currents in a form factor that is easy to install in any type of mooring line configuration, or simply attached to a bottom or surface platform.

Raw magnetometer data can be stored for post calibration of compass when used without the inductive modem option.

Highlights

- ✓ Full ocean-depth single-point current meter
- ✓ Titanium housing
- ✓ Diagnostics mode for mooring performance evaluation

Applications

- ✓ Studies of deep-water currents
- ✓ Studies of tidal currents
- ✓ Attached to mooring lines
- ✓ Measurements of unaffected currents from physical structures
- ✓ In conjunction with riser monitoring systems
- ✓ Alternative to conventional current meters with errors due to fouling
- ✓ Combination of currents and high-accuracy CTD data
- ✓ Near-bed current measurements from landers
- ✓ Deep ocean mining support

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
Accuracy	±1% of measured value ±0.5 cm/s
Horizontal velocity precision (consult instrument SW)	Typ. 1 cm/s
Maximum sampling rate (output)	2 Hz
Internal sampling rate	4 Hz

→ Echo intensity

Sampling	Same as velocity
Resolution	0.5 dB
Dynamic range	90 dB
Transducer acoustic frequency	2 MHz
Number of beams	3
Beam width	1.7°

→ Sensors

Temperature:

Temp. range	-4 to +40 °C
Temp. accuracy/resolution	0.1 °C/0.01 °C
Temp. time response	<1 min

Compass: Solid State Magnetometer

Accuracy/resolution <2° for tilt < 30° / 0.01°

Tilt: Solid state accelerometer

Accuracy/resolution 0.2° for tilt < 30° / 0.01°

Maximum tilt 3D

Up or Down Automatic detect

Pressure: Piezoresistive

Range 6000 m

Accuracy/precision 0.25% FS / 0.005% of full scale

→ Digital inputs

No. of channels	1
Digital Input format	MicroCat CTD

→ Data recording

Capacity 16 GB

→ 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
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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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Absolut 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	0.45-45 W, adjustable over 20 dB
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→ Batteries

Internal battery capacity	1-3 x 50 Wh (Alkaline); 1-3 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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New battery voltage	13.5 VDC
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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 approval	EN IEC 61000-6-2:2019, EN IEC 61000-6-4:2019
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Depth rating	6000m
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→ Connectors

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

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

Maximum housing diameter	84 mm
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Maximum length	623 mm
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→ Weight

Weight in air (without batteries) 7600 g

Weight in water (without batteries) 4350 g

→ Arrangements

D2VC

Deep water, 2Mhz, Vertical orientation, Current meter