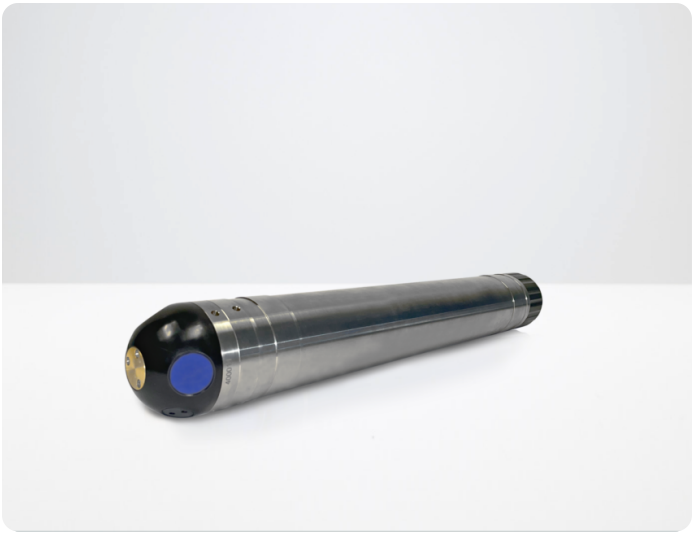
# Aquadopp

6000 m, Generation 2

**High-performance full ocean depth, single-point current meter with titanium housing**



With all the robust and easy-to-use 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.

The 6000 m Aquadopp now offers 6% broadband measurements and “hibernation mode” between measurements, enabling precise data collection with lower power consumption. The upgraded deepwater Aquadopp design also offers increased internal battery storage, extending potential deployment duration.

**See the details of the Generation 2 Aquadopp updates in the release notes here.**

**Download our guide to Aquadopp ADCPs here.**

## Highlights

- Single-point current meter
- Titanium housing for long-term deployments at full ocean depth
- Ideal for deep water moorings
- LED blinks when pinging for peace of mind during deployment

## Applications

- Studies of deep-water currents
- Attached to mooring lines
- Combined with riser monitoring systems
- Near-bed current measurements from landers

## Technical specifications

| Water velocity measurements | |
|---|---|
| Cell size | 0.75 m |
| Maximum number of cells | 1 |
| Blanking distance | 0.1-5.0 m (user-selectable) |
| Velocity range (along beam) | User-selectable 1.0 to 5.0 m/s |
| Accuracy | ±1% of measured value ±0.5 cm/s |

## Water velocity measurements

| | |
|---|---|
| Horizontal velocity precision (consult instrument SW) | Typ. 1 cm/s |
| Maximum sampling rate (output) | 1 Hz |

## Echo intensity

| | |
|---|---|
| Sampling | Same as velocity |
| Resolution | 0.5 dB |
| Dynamic range | 70 dB |
| Transducer acoustic frequency | 2 MHz |
| Number of beams | 3 (see GA drawing 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: | 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 | Full 3D orientation sensing. Recommended instrument orientation and allowable tilt depend on the measurement application. |
| Up or Down | Automatic detect |
| Pressure: | Piezoresistive |
| Range | 6000 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 |

## Real-time clock

| | |
|---|---|
| Accuracy | ±1 min/year |
| Backup in absence of power | 4 weeks |

## Data communications

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

## Software

| | |
|---|---|
| Operating system | Cross platform |

## Software

| | |
|---|---|
| Functions | Deployment planning, instrument configuration, data retrieval and conversion. Online data display. |

## Power

| | |
|---|---|
| DC input | 9-24 VDC |
| Absolut maximum DC input | 26 VDC |
| Maximum peak current | 4.5 A |
| Power consumption | Consult Nortek Deployment Software |
| Sleep current | < 40 uA |
| Transmit power | Adjustable |

## Batteries

| | |
|---|---|
| Internal battery capacity | 1-3 x 50 Wh (Alkaline); 2-3 x 165 Wh (Lithium); 1-3 x 76 Wh (Li-ion) |
| Battery weight | 430g per 50 Wh (Alkaline); 380g per 165 Wh (Lithium); 300g per 76 Wh (Li-ion) |

## Environmental

| | |
|---|---|
| Operating temperature | -5 to +40 °C |
| Storage temperature | -20 to +60 °C |
| Shock and vibration | Shock: IEC 60068-2-27, Vibration: IEC 60068-2-64 |
| EMC | EN IEC 61000-6-2:2019, EN IEC 61000-6-4:2019 |
| Depth rating | 6000m |

## Connectors

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

## Materials

| | |
|---|---|
| Standard model | Titanium Gr. 5, POM, Naval Brass, epoxy |

## Dimensions (see drawings for details)

| | |
|---|---|
| Maximum housing diameter | 84 mm |
| Maximum length | 623 mm |

## Weight

| | |
|---|---|
| Weight in air (without batteries) | 7600 g |
| Weight in water (without batteries) | 4350 g |

## Arrangements

| | |
|---|---|
| D2VC | Deep water, 2Mhz, Vertical orientation, Current meter |