# Aquadopp Profiler 1 MHz - Legacy

**This version of the Aquadopp Profiler is no longer available.**

**Please see the Aquadopp Profiler 2.**

This version of the Aquadopp remains functional and supported. Please visit our support center if you require assistance.

## Highlights

## Applications

## Technical specifications

| Water velocity measurements | |
|---|---|
| Maximum profiling range | 12-25 m |
| Cell size | 0.3-4 m |
| Minimum blanking | 0.20 m |
| Maximum number of cells | 96 |
| Measurement cell position | N/A |
| Default position (along beam) | N/A |
| Velocity range | ±10 m/s |
| Accuracy | ±1% of measured value ±0.5 cm/s |
| Velocity precision | Consult instrument software |
| Maximum sampling rate (output) | 1 Hz |
| Internal sampling rate | 7 Hz |

| Echo intensity (along slanted beams) | |
|---|---|
| Sampling | Same as velocity |
| Resolution | 0.45 dB |
| Dynamic range | 90 dB |
| Transducer acoustic frequency | 1 MHz |
| Number of beams | 3 |
| Beam width | 3.4° |

| HR option | |
|---|---|
| Maximum profiling range | 6 m |

| HR option | |
|---|---|
| Cell size | 20-300 mm |
| Minimum blanking | 0.2 m |
| Maximum number of cells | 128 |
| Range/Velocity limitations | Product of profiling range and velocity should not exceed 1.0 m2/s |
| Accuracy | ±1% of measured value ±0.5 cm/s |
| Max. sampling rate | 1 Hz (continuous mode), 8 Hz (burst mode) |

| Sensors | |
|---|---|
| Temperature: | Thermistor embedded in head |
| Temp. range | -4 to +40 °C |
| Temp. accuracy/resolution | 0.1 °C/0.01 °C |
| Temp. time response | 10 min |
| Compass: | Magnetometer |
| Accuracy/resolution | 2°/0.1° for tilt < 20° |
| Tilt: | Liquid level |
| Accuracy/resolution | 0.2°/0.1° |
| Maximum tilt | 30° |
| Up or Down | Automatic detect |
| Pressure: | Piezoresistive |
| Range | 0-100 m (inquire for options) |
| Accuracy/precision | 0.5% FS / 0.005% of full scale |

| Data recording | |
|---|---|
| Capacity | 9 MB, can add 4/16 GB |
| Data record | 9*Ncells + 32 bytes |
| Diagnostics record | N/A |
| Wave record | Nsamples * 24 + 60 bytes |
| Mode | Stop when full (default) or wrap mode |

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

| Data communications | |
|---|---|
| I/O | RS-232 or RS-422 |
| Communication baud rate | 300-115200 Bd |
| Recorder download baud rate | 600/1200 kBd for both RS-232 and RS-422 |
| User control | Handled via "Aquadopp" software, ActiveX®function calls, or direct commands with binary or ASCII data output |

| Software | |
|---|---|
| Functions | Deployment planning, instrument configuration, data retrieval and conversion (for Windows®) |

| Power | |
|---|---|
| DC input | 9-15 V DC |

| Power | |
|---|---|
| Maximum peak current | 3 A |
| Avg. power consumption | 0.05 W |
| Sleep current | < 100 µA |
| Transmit power | 0.3-20 W, 3 adjustable levels |

| Batteries | |
|---|---|
| Battery capacity | 1) 50 Wh (alkaline or Li-ion), 2) 165 Wh (lithium), 3) Single or dual |
| New battery voltage | 13.5 V DC (alkaline) |

| Environmental | |
|---|---|
| Operating temperature | -5 to +40 °C |
| Storage temperature | -20 to +60 °C |
| Shock and vibration | IEC 721-3-7 |
| EMC approval | IEC 61000 |
| Depth rating | 300 m (3000 m option) |

| Connectors | |
|---|---|
| Bulkhead | MCBH-8-FS |
| Cable | PMCIL-8-MP on 10 m Polyurethane cable |

| Materials | |
|---|---|
| Standard model | POM and polyurethane plastics with titanium fasteners |

| Dimensions | |
|---|---|
| Maximum diameter | 75 mm |
| Maximum length | ~550 mm (single battery), +110 mm (double battery) depending on head configuration |

| Weight | |
|---|---|
| Weight in air | 2.2 kg |
| Weight in water | 0.2 kg |