Aquadopp Profiler 600 kHz - Legacy - 300 m





This version of the Aquadopp Profiler 600 kHz is no longer available.

Please see the Aquadopp Profiler 600kHz Generation 2.

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

Highlights

Applications

Technical specifications

→ Water velocity measurements	
Maximum profiling range	30-40 m
Cell size	1-4 m
Minimum blanking	0.50 m
Maximum number of cells	96
Measurement cell position	N/A
Default position (along beam)	N/A
Velocity range	±10 m/s
Accuracy	$\pm 1\%$ of measured value ± 0.5 cm/s
Velocity precision	Consult instrument software
Maximum sampling rate (output)	1 Hz
Internal sampling rate	4 Hz
→ Echo intensity (along slanted be	eams)
Sampling	Same as velocity
Resolution	0.45 dB
Dynamic range	90 dB
Transducer acoustic frequency	600 kHz
Number of beams	3
Beam width	3.0°
→ HR option	
Maximum profiling range	N/A
Cell size	N/A
Minimum blanking	N/A
Maximum number of cells	N/A
Range/Velocity limitations	N/A
Accuracy	N/A
Max. sampling rate	N/A
→ Z-Cell option	
Cell zero acoustic frequency	N/A
Maximum profiling range	N/A
Number of beams	N/A
→ 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° Tit: 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% F5 / 0.005% of full scale → Analog inputs No. of channels 2 Supply voltage to analog output devices Battery voltage/500 mA, 2) +5 V/250 mA, 3) +12 V/100 mA Voltage input 0.5 V Resolution 16-bit A/D → 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 R5-232 or R5-422 Communication baud rate 300-115200 Bd Recorder download baud rate 600/1200 RB for both R5-232 and R5-422 User control Handled via "Aquadopp" software, ActiveX®function calls, or direct commands with binary or A5Cil data output → Connectors Bulkhead MCBH-8-FS Cable PMCIL-8-MP on 10m polyurethane cable → Software Functions Deployment planning, instrument configuration, data retrieval and conversion (for Windows®) → Power DC input 9-15 ∨ DC Maximum peak current 3 A	→ Sensors	
Accuracy/resolution O.2*/0.1° Maximum tilt Jup or Down Automatic detect Pressure: Piezoresistive Range O-100 m (inquire for options) Accuracy/precision O.5% FS / 0.005% of full scale → Analog inputs No. of channels 2 Supply voltage to analog output devices Battery voltage/500 mA, 2) +5 V/250 mA, 3) +12 V/100 mA Voltage input O-5 V Resolution 16-bit A/D → 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 Namples * 24 + 60 bytes Mode → Real-time clock Accuracy ±1 min/year Backup in absence of power 4 weeks → Data communications VO RS-232 or RS-422 Communication 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 → Connectors Bulkhead MCBH-8-FS Cable PMCIL-8-MP on 10m polyurethane cable → Software Functions Deployment planning, instrument configuration, data retrieval and conversion (for Windows®) → Power DC input 9-15 V DC	Accuracy/resolution	2°/0.1° for tilt < 20°
Maximum tilt Up or Down Automatic detect Pressure: Piezoresistive Range O-100 m (inquire for options) Accuracy/precision O.5% FS / 0.005% of full scale → Analog inputs No. of channels 2 Supply voltage to analog output devices Battery voltage/500 mA, 2) +5 V/250 mA, 3) +12 V/100 mA Voltage input O.5 V Resolution 16-bit A/D → 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 Resolution BRS-232 or RS-422 Communication baud rate G00/1200 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 → Connectors Bulkhead MCBH-8-FS Cable PMCIL-8-MP on 10m polyurethane cable → Software Functions Deployment planning, instrument configuration, data retrieval and conversion (for Windows®) → Power DC input 9-15 ∨ DC	Tilt:	Liquid level
Up or Down Automatic detect Pressure: Piezoresistive Range 0-100 m (inquire for options) Accuracy/precision 0.5% FS / 0.005% of full scale → Analog inputs No. of channels 2 Supply voltage to analog output devices Battery voltage/500 mA, 2) +5 V/250 mA, 3) +12 V/100 mA Voltage input 0-5 V Resolution 16-bit A/D → 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 5top when full (default) or wrap mode → Real-time clock Accuracy ±1 min/year Backup in absence of power 4 weeks → Data communications I/O R5-232 or R5-422 Communication baud rate 600/1200 kBd for both R5-232 and R5-422 User control Handled via "Aquadopp" software, ActiveX®function calls, or direct commands with binary or ASCII data output → Connectors Bulkhead MCBH-8-FS Cable PMCIL-8-MP on 10m polyurethane cable → Software Functions Deployment planning, instrument configuration, data retrieval and conversion (for Windows®)	Accuracy/resolution	0.2°/0.1°
Pressure: Plezoresistive Range 0-100 m (inquire for options) Accuracy/precision 0.5% FS / 0.005% of full scale → Analog inputs No. of channels 2 Supply voltage to analog output devices Battery voltage/500 mA, 2) +5 V/250 mA, 3) +12 V/100 mA Voltage input 0-5 V Resolution 16-bit A/D → 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 → Connectors Bulkhead MCBH-8-FS Cable PMCIL-8-MP on 10m polyurethane cable → Software Functions Deployment planning, instrument configuration, data retrieval and conversion (for Windows®)	Maximum tilt	30°
Range 0-100 m (inquire for options) Accuracy/precision 0.5% FS / 0.005% of full scale → Analog inputs No. of channels 2 Supply voltage to analog output devices Battery voltage/500 mA, 2) +5 V/250 mA, 3) +12 V/100 mA Voltage input 0-5 V Resolution 16-bit A/D → 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 → Connectors Bulkhead MCBH-8-FS Cable PMCIL-8-MP on 10m polyurethane cable → Software Functions Deployment planning, instrument configuration, data retrieval and conversion (for Windows®) → Power DC input 9-15 V DC	Up or Down	Automatic detect
Accuracy/precision Analog inputs No. of channels 2 Supply voltage to analog output devices Battery voltage/500 mA, 2) +5 V/250 mA, 3) +12 V/100 mA Voltage input 0-5 V Resolution 16-bit A/D Data recording Capacity 9 MB, can add 4/16 GB Data record 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 Data communications I/O RS-232 or RS-422 Communication baud rate 600/1200 kB 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 Cable PMCIL-8-MP on 10m polyurethane cable Power Functions Deployment planning, instrument configuration, data retrieval and conversion (for Windows®) Power DC input 9-15 V DC	Pressure:	Piezoresistive
No. of channels Supply voltage to analog output devices Battery voltage/500 mA, 2) +5 V/250 mA, 3) +12 V/100 mA Voltage input O-5 V Resolution 16-bit A/D 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 V/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 Cable PMCIL-8-MP on 10m polyurethane cable PSoftware Functions Deployment planning, instrument configuration, data retrieval and conversion (for Windows®) Power DC input 9-15 V DC	Range	0-100 m (inquire for options)
No. of channels Supply voltage to analog output devices Battery voltage/500 mA, 2) +5 V/250 mA, 3) +12 V/100 mA Voltage input 0-5 V Resolution 16-bit A/D 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 Backup in absence of power Data communications I/O RS-232 or RS-422 Communication 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 Connectors Bulkhead MCBH-8-FS Cable PMCIL-8-MP on 10m polyurethane cable Power Functions Deployment planning, instrument configuration, data retrieval and conversion (for Windows®) Power DC input 9-15 V DC	Accuracy/precision	0.5% FS / 0.005% of full scale
Supply voltage to analog output devices Battery voltage/500 mA, 2) +5 V/250 mA, 3) +12 V/100 mA Voltage input 0-5 V Resolution 16-bit A/D 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 Backup in absence of power A weeks Data communications I/O RS-232 or RS-422 Communication 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 Connectors Bulkhead MCBH-8-FS Cable PMCIL-8-MP on 10m polyurethane cable Poower Functions Deployment planning, instrument configuration, data retrieval and conversion (for Windows®) Power DC input 9-15 V DC	→ Analog inputs	
devices Battery voltage/500 mA, 2) +5 V/250 mA, 3) +12 V/100 mA Voltage input 0-5 V Resolution 16-bit A/D → 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 → Connectors Bulkhead MCBH-8-FS Cable PMCIL-8-MP on 10m polyurethane cable → Software Functions Deployment planning, instrument configuration, data retrieval and conversion (for Windows®) → Power DC input 9-15 V DC	No. of channels	2
Resolution 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 Value 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 Connectors Bulkhead MCBH-8-FS Cable PMCIL-8-MP on 10m polyurethane cable Software Functions Deployment planning, instrument configuration, data retrieval and conversion (for Windows®) Power DC input 9-15 V DC		·
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 → Connectors Bulkhead MCBH-8-FS Cable PMCIL-8-MP on 10m polyurethane cable → Software Functions Deployment planning, instrument configuration, data retrieval and conversion (for Windows®) → Power DC input 9-15 V DC	Voltage input	0-5 V
Data record Data record Data record 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 Connectors Bulkhead MCBH-8-FS Cable PMCIL-8-MP on 10m polyurethane cable Software Functions Deployment planning, instrument configuration, data retrieval and conversion (for Windows®) Power DC input 9-15 V DC	Resolution	16-bit A/D
Data record Diagnostics record N/A Wave record Nsamples * 24 + 60 bytes Mode Stop when full (default) or wrap mode Real-time clock Accuracy Backup in absence of power 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 Connectors Bulkhead MCBH-8-FS Cable PMCIL-8-MP on 10m polyurethane cable Software Functions Deployment planning, instrument configuration, data retrieval and conversion (for Windows®) Power DC input 9-15 V DC	→ Data recording	
Diagnostics record 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 Connectors Bulkhead MCBH-8-FS Cable PMCIL-8-MP on 10m polyurethane cable Software Functions Deployment planning, instrument configuration, data retrieval and conversion (for Windows®) Power DC input 9-15 V DC	Capacity	9 MB, can add 4/16 GB
Wave record Nsamples * 24 + 60 bytes Mode Stop when full (default) or wrap mode → Real-time clock ±1 min/year Accuracy ±1 min/year Backup in absence of power 4 weeks → Data communications I/O 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 → Connectors Bulkhead Bulkhead MCBH-8-FS Cable PMCIL-8-MP on 10m polyurethane cable → Software Functions Functions Deployment planning, instrument configuration, data retrieval and conversion (for Windows®) → Power DC input 9-15 V DC	Data record	9*Ncells + 32 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 → Connectors Bulkhead MCBH-8-FS Cable PMCIL-8-MP on 10m polyurethane cable → Software Functions Deployment planning, instrument configuration, data retrieval and conversion (for Windows®) → Power DC input 9-15 V DC	Diagnostics record	N/A
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 → Connectors Bulkhead MCBH-8-FS Cable PMCIL-8-MP on 10m polyurethane cable → Software Functions Deployment planning, instrument configuration, data retrieval and conversion (for Windows®) → Power DC input 9-15 V DC	Wave record	Nsamples * 24 + 60 bytes
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 → Connectors Bulkhead MCBH-8-FS Cable PMCIL-8-MP on 10m polyurethane cable → Software Functions Deployment planning, instrument configuration, data retrieval and conversion (for Windows®) → Power DC input 9-15 V DC	Mode	Stop when full (default) or wrap mode
Backup in absence of power → 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 → Connectors Bulkhead MCBH-8-FS Cable PMCIL-8-MP on 10m polyurethane cable → Software Functions Deployment planning, instrument configuration, data retrieval and conversion (for Windows®) → Power DC input 9-15 V DC	→ Real-time clock	
	Accuracy	±1 min/year
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 → Connectors Bulkhead MCBH-8-FS Cable PMCIL-8-MP on 10m polyurethane cable → Software Functions Deployment planning, instrument configuration, data retrieval and conversion (for Windows®) → Power DC input 9-15 V DC	Backup in absence of power	4 weeks
Communication baud rate 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 → Connectors Bulkhead MCBH-8-FS Cable PMCIL-8-MP on 10m polyurethane cable → Software Functions Deployment planning, instrument configuration, data retrieval and conversion (for Windows®) → Power DC input 9-15 V DC	→ Data communications	
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 → Connectors Bulkhead Bulkhead MCBH-8-FS Cable PMCIL-8-MP on 10m polyurethane cable → Software Deployment planning, instrument configuration, data retrieval and conversion (for Windows®) → Power DC input	I/O	RS-232 or RS-422
User control Handled via "Aquadopp" software, ActiveX® function calls, or direct commands with binary or ASCII data output → Connectors Bulkhead MCBH-8-FS Cable PMCIL-8-MP on 10m polyurethane cable → Software Functions Deployment planning, instrument configuration, data retrieval and conversion (for Windows®) → Power DC input 9-15 V DC	Communication baud rate	300-115200 Bd
direct commands with binary or ASCII data output → Connectors Bulkhead MCBH-8-FS Cable PMCIL-8-MP on 10m polyurethane cable → Software Functions Deployment planning, instrument configuration, data retrieval and conversion (for Windows®) → Power DC input 9-15 V DC	Recorder download baud rate	600/1200 kBd for both RS-232 and RS-422
Bulkhead MCBH-8-FS Cable PMCIL-8-MP on 10m polyurethane cable → Software Functions Deployment planning, instrument configuration, data retrieval and conversion (for Windows®) → Power DC input 9-15 V DC	User control	
Cable PMCIL-8-MP on 10m polyurethane cable → Software Functions Deployment planning, instrument configuration, data retrieval and conversion (for Windows®) → Power DC input 9-15 V DC	→ Connectors	
→ Software Functions Deployment planning, instrument configuration, data retrieval and conversion (for Windows®) → Power DC input 9-15 V DC	Bulkhead	MCBH-8-FS
Functions Deployment planning, instrument configuration, data retrieval and conversion (for Windows®) → Power DC input 9-15 V DC	Cable	PMCIL-8-MP on 10m polyurethane cable
and conversion (for Windows®) → Power DC input 9-15 V DC	→ Software	
DC input 9-15 V DC	Functions	
·	→ Power	
Maximum peak current 3 A	DC input	9-15 V DC
	Maximum peak current	3 A

→ Power	
Avg. power consumption	0.06 W
Sleep current	< 100 μΑ
Transmit power	0.3-20 W, 4 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 721-3-6
EMC approval	IEC 61000
Depth rating	300 m
→ Materials	
Standard model	POM and polyurethane plastics with titanium fasteners
→ Dimensions	
Maximum diameter	100 mm
Maximum length	\sim 550 mm (single battery), +110 mm (double battery) depending on head configuration
→ Weight	
Weight in air	2.9 kg
Weight in water	0.4 kg
→ Options	

1) Alkaline, lithium or Li-ion external batteries, 2) Inquire for different head configurations