12/21/2024

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 support center 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	±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 beams)	
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

→ Sensors	
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
→ Analog inputs	
No. of channels	2
Supply voltage to analog output devices	Three options selectable through firmware commands:1) 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
Maximum peak current	3 A

→ Power	
Avg. power consumption	0.06 W
Sleep current	< 100 µA
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	~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