

## **Aquadopp Profiler 1 MHz Z-Cell - Legacy**

No longer available. See new version.

This version of the Aquadopp Profiler Z-Cell is no longer available.

Please see the <u>Aquadopp Profiler Z-Cell Generation 2</u>.

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	12-25 m
Cell size	0.3-4 m
Minimum blanking	0.20 m when profiling; 0 m when Z-Cell enabled
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 $\pm 0.5$ cm/s
Velocity precision	Consult instrument software
Maximum sampling rate (output)	1 Hz
Internal sampling rate	6 Hz

Z-Cell Properties- FOR Z-CELI	_ 2
Distance to measurement volume	0.05 - 2.5 m
Cell size	0.2 - 1.5 m
Velocity range (Horizontal)	±5 m/s
Transducer acoustic frequency	2 MHz
Number of beams	2

Echo intensity (along slanted beams)	
Sampling	Same as velocity
Resolution	0.45 dB

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Echo intensity (along slanted	beams)
Dynamic range	90 dB
Transducer acoustic frequency	1 MHz
Number of beams	3
Beam width	3.4°
HR option (Z-Cell will be disal	bled)
Maximum profiling range	6 m
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	$\pm 1\%$ of measured value $\pm 0.5$ 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	$2^{\circ}/0.1^{\circ}$ for tilt $< 20^{\circ}$
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

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commands with binary or ASCII data output

Power C input laximum peak current vg. power consumption leep current ransmit power	Deployment planning, instrument configuration, data retrieval and conversion (for Windows®).  9-15 V DC  3 A  0.05 W  < 100 µA  0.3-20 W, 3 adjustable levels
C input laximum peak current vg. power consumption leep current	3 A 0.05 W < 100 μA
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vg. power consumption leep current	0.05 W < 100 μA
leep current	< 100 μΑ
•	
ransmit power	0.3-20 W, 3 adjustable levels
Batteries	
attery capacity	50 Wh (alkaline or Li-ion), 165 Wh (lithium), Single or dual
ew battery voltage	13.5 V DC (alkaline)
Environmental	
perating temperature	-5 to +40 °C
torage temperature	-20 to +60 °C
hock and vibration	IEC 721-3-7
MC approval	IEC 61000
epth rating	300 m
Connectors	
ulkhead	MCBH-8-FS
able	PMCIL-8-MP on 10 m polyurethane cable
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Weight	
/eight in air	2.2 kg
/eight in water	0.2 kg

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