



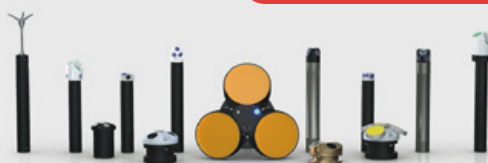


Part no: 650146 (N2032-258)	Part no: 650133 (N2032-214)	Part no: 650134 (N2032-215)	Part no: 650135 (N2032-216)
			
Signature 250-500 Endbell Straight 2xMCBH+PR	Signature 250-500 Endbell 2xMCBH+PR	Signature 250-500 Endbell Souriau+PR	Signature 250-500 Endbell Souriau+PR+MCBH
6 pin + 2 pin water blocked MCBH bronze (SubConn) and pressure release valve	6 pin + 2 pin water blocked MCBH bronze (SubConn) and pressure release valve	7 pin Souriau REC10 M bronze and pressure release valve	7 pin Souriau REC10M bronze, pressure release valve and 6 pin water blocked MCBH bronze (SubConn)



Technical Specifications

Water Velocity Measurements

Profiling Range*:	200m
Cell Size:	1-8 m
Min. Blanking:	0.5 m
Max # Cells:	200
Velocity Range (along beam):	User selectable 2.5 or 5.0 m/s
Minimum Accuracy: (inquire for more accurate firmware or hardware versions)	1% of measured value ± 0.5 cm/s
Velocity Resolution:	0.1 cm/s
Max Sampling Rate:	1 Hz
Max Sampling Rate Five beams:	1 Hz (4 beam + AST)

*) Maximum range depends on transmit power and acoustic scattering conditions

AD2CP Measurement modes*

Single or Concurrent:	Average and Waves/Ice
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*) US Patent 8223588

Echo Intensity

Sampling:	Same as Velocity
Resolution:	0.5 dB
Dynamic Range:	70 dB
Transducer Acoustic Frequency:	250 kHz
Number of Beams:	5; 4 slanted at 20°, 1 vertical at 500 kHz(optional)
Beam Width:	2.3° (slanted) 2.2° (vertical)

Sensors

Temperature:	Thermistor Embedded in Head
Temp. Range:	-4 to +40 °C
Temp. Accuracy/Resolution:	0.1 °C/0.01 °C
Temp. Time Response:	2 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
Up Or Down:	Automatic Detect
Pressure:	Piezoresistive
Standard Range:	0-500 (inquire for options)
Accuracy/Precision:	0.1% FS / Better than 0.002% of full scale

Data Communications

Ethernet:	10/100 Mbits Auto MDI-X TCP/IP, UDP, HTTP protocols Fixed IP/DHCP client/AutolP, UPnP
Serial:	Configurable RS-232/RS422 300-1250000 bps
Recorder Download Baud Rate:	20 Mbit/s (Ethernet only) - 1 GByte in 6 minutes
Controller Interface:	ASCII command interface with telemetry options over Telnet and serial interface. Complete data download over standard Ethernet FTP. Telemetry file downloadable over serial interface. See interface manual for more information.

Data Recording

Capacity (Standard):	16 GB/optional 64GB
Data Record:	86 bytes + 4 x Nbeams x Ncells
Mode:	Stop when full

Real Time Clock

Accuracy:	±1 min/year
Clock Retention in Absence of External Power:	1 year. Backup battery recharges automatically when the instrument is powered.

Software

Operating System:	Windows® 7 or later
Functions:	Deployment planning, start with alarm, data retrieval, conversion to ASCII and Matlab format.
Online Data:	Collection and graphical display.

Power

DCInput:	15-48 VDC
Maximum Peak Current:	1.5 Amp
Max.Average Consumption at 1Hz:	15W
Typical Average Consumption*:	400mW
Sleep Consumption:	100uA, power depends on supply voltage
Transmit Power Per Beam:	4-200W, adjustable levels
Ping Sequence:	Multiplexing or parallel

*) 10 min. average current profile, 1cm/sec horizontal Precision, Max cell size, max power level and long range mode. See deployment SW for other configurations.

Environmental

Operating Temperature:	-4°C to 40°C
Storage Temperature:	-20°C to 60°C
Shock and Vibration:	IEC 60068-1/IEC60068-2-64
Depth Rating:	300 m

Batteries

Internal:	Single alkaline 540Wh or lithium 1800 Wh
External:	Single or double alkaline 540Wh or lithium 1800 Wh (External battery cans have a depth rating of 500 m)
Duration:	The battery consumption is a complex function of the instrument configuration. Please consult the Signature Deployment Software for more information.

AST/Altimeter option

Frequency:	500 kHz
Max distance:	170 m
Precision:	2 cm

Ice Measurement Option

Parameters:	Ice thickness, speed and direction, echo sounder data
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Wave Measurement Option

Maximum Depth:	150 m
Height Range:	-15 to +15 m
Accuracy/Resolution (Hs):	<1% of measured value / 2cm
Accuracy/Resolution (Dir):	2° / 0.1°
Period Range:	2-50 s
Cut-Off Period(Hs):	25m depth; 2 sec 50m depth; 2 sec 100m depth; 2.2 sec 150m depth; 2.7 sec
Cut-off Period (dir):	Please inquire

Sampling Rate (Velocity and AST):	1 Hz
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Materials

Standard Model:	Delrin® with titanium bolts. Reinforced polyurethane transducer cups
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Connectors

See GA drawings

Dimensions and weight

Weight in Air:	18,5Kg (short housing 17,1Kg)
Weight in Water:	1,5Kg (short housing 5,2Kg)
Weight Alkaline Battery:	5,0Kg
Weight Lithium Battery:	3,9Kg

