



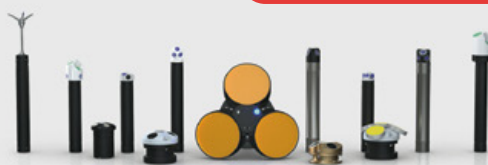


Part no: 650146 (N2032-258)	Part no: 650133 (N2032-214)	Part no: 650134 (N2032-215)	Part no: 650135 (N2032-216)
			
<b>Signature 250-500 Endbell Straight 2xMCBH+PR</b>	<b>Signature 250-500 Endbell 2xMCBH+PR</b>	<b>Signature 250-500 Endbell Souriau+PR</b>	<b>Signature 250-500 Endbell Souriau+PR+MCBH</b>
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

<b>Temperature:</b>	<b>Thermistor Embedded in Head</b>
Temp. Range:	-4 to +40 °C
Temp. Accuracy/Resolution:	0.1 °C/0.01 °C
Temp. Time Response:	2 min
<b>Compass:</b>	<b>Solid State Magnetometer</b>
Accuracy/Resolution:	2° for tilt <30°/0.01°
<b>Tilt:</b>	<b>Solid State Accelerometer</b>
Accuracy/Resolution:	0.2° for tilt <30°/0.01°
Maximum Tilt:	Full 3D
Up Or Down:	Automatic Detect
<b>Pressure:</b>	<b>Piezoresistive</b>
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



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