CastAway CTD

SPECS

The CastAway®-CTD

with profiling and analysis software

The CastAway-CTD
Accurate, reliable data in the palm of your hand!

The CastAway-CTD is a lightweight, easy to use instrument designed for quick and accurate conductivity, temperature, and depth profiles. Starting with a unique six-electrode conductivity cell and fast response thermistor the CastAway makes use of modern technology to provide state of the art CTD measurements.

The palm-sized CastAway-CTD can easily be deployed from small boats. Each cast is referenced with both time and location using its built-in GPS receiver. Plots of conductivity, temperature, salinity and sound speed versus depth can be viewed immediately on the CastAway's integrated color LCD screen in the field.

The CastAway incorporates the most modern technology available yet is simple to use. It is designed for profiling down to 100 m and is easy to deploy.

The rugged, non-corrosive housing, AA battery power and tool-free operation reflect the technician-friendly pedigree of the CastAway-CTD. Profile data is easily downloaded via Bluetooth to a Windows computer for detailed analysis and/or export. The CastAway software displays profiles of the casts in addition to mapping the locations of the data collection points. Data can also be exported to Hypack or Matlab and integrates with RiverSurveyor software for applying sound speed corrections.

HIGHLIGHTS:

- *5Hz response and sampling rate*
- *Accurate to 0.1 PSU, 0.05°C*
- *Internal GPS*
- *Bluetooth wireless data download*
- *No user calibration required*
- *No tools, computers or cables required*

The CastAway-CTD is fully compatible with the RiverSurveyor S5/M9

APPLICATIONS:

- Coastal Oceanography
- Hydrology
- Aquaculture/Fisheries
- Saltwater Intrusion
- Surveying/Hydrography
- Sound Velocity Profiles
- Field Sensor Verification
- Estuarine Research

sontek.com/castaway

CastAway CTD Specifications

To order, or for more information, contact SonTek at inquiry@sontek.com

+1 858 546 8327 (Globally)
sontek.com/castaway

YSI Environmental
+1 937 767 7241
Fax +1 937 767 9353
environmental@ysi.com

YSI Integrated Systems & Services
+1 508 748 0366
systems@ysi.com

SonTek/YSI
+1 858 546 8327
inquiry@sontek.com

YSI Gulf Coast
+1 225 753 2650
gulfcoast@ysi.com

YSI Hydrodata (UK)
+44 1462 673 581
europe@ysi.com

YSI Nanotech (Abu Dhabi)
+971 25631316
samer@nanotech.co.jp

YSI South Asia
+91 9891220639
sham@ysi.com

YSI (Hong Kong) Ltd
+852 2891 8154
hongkong@ysi.com

YSI (China) Ltd
+86 10 5203 9675
beijing@ysi-china.com

YSI Nanotech (Japan)
+81 44 222 0009
nanotech@ysi.com

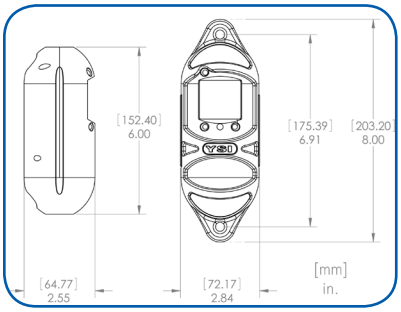
YSI Australia
+61 7 39017223
australia@ysi.com

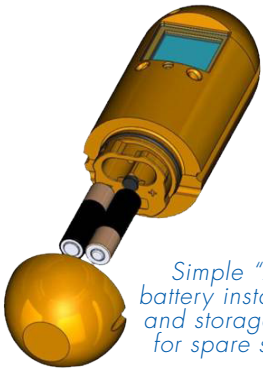
ISO 9001
ISO 14001
San Diego, California, USA

CE

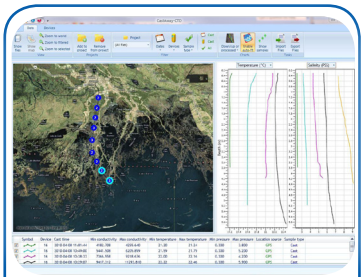
Sound Principles. Good Advice.

Memory	15 MB (750+ casts based on typical usage)
Communications	Bluetooth class II, up to 10 m range
Power	2 "AA" alkaline batteries, 40 hours continuous use
Data Output Format	- ASCII (CSV) -Hypack -Matlab
Environmental	- Depth range: 0-100 m - Use temperature: -5° to 45° C - Storage temperature: -10° to 50° C
Sampling Modes	- Casting (up/down) - Point sample (moving the unit back and forth)
Software	- Windows XP/Vista/7 - Geo-referenced - Multi-language - Data plots, filtering, import/export
Accessories	- Rugged plastic storage/shipping case - Polyurethane jacket - 15m deployment line - Bluetooth dongle - Two locking carabiners - Three magnetic stylus pens - Cleaning brush
Thermistor Response	Less than 200 ms (5 Hz)
Sampling Rate	5 Hz
Weight	In air: 1.0 lb (0.45 kg) In water: 0.06 lbs (0.03 kg)





Simple "AA" battery installation and storage area for spare stylus.



A screen capture of data from a river delta in Louisiana acquired using a CastAway-CTD. 21 casts were collected in less than 3.5 hours.

Each CastAway ships in this rugged plastic case, complete with accessories and quick start guide.

The CastAway-CTD Output Parameters

	Range	Resolution	Accuracy	Measured or Derived
Conductivity	0 to 100,000 µS/cm	1µS/cm	± 0.25% ± 5 µS/cm	Measured
Temperature	-5° - 45° C	0.01° C	± 0.05° C	Measured
Pressure	0 to 100 dBar	0.01 dBar	± 0.25% FS	Measured
Salinity	Up to 42 (PSS-78)	0.01 (PSS-78)	± 0.1 (PSS-78)	PSS-78[3]
Sound Speed	1400 - 1730 m/s	0.01 m/s	± 0.15 m/s	Chen-Millero[4]
Density[1]	990 to 1035 kg/m^3	0.004 kg/m^3	± 0.02 kg/m^3	EOS80[5]
Depth	0 to 100 m	0.01m	± 0.25% FS	EOS80[5]
Specific Conductivity[2]	0 to 250,000 µS/cm	1µS/cm	± 0.25% ±5 µS/cm	EOS80[5]
GPS			10 m	

[1]Based on temperature resolution and accuracy.
[2]Based on 100,000 µS/cm at -5° C.
[3]1978 Practical Salinity Scale.
[4]Chen-Millero, 1977. Speed-of-sound in sea water at high pressures.
[5]International Equation of State for sea water (EOS-80).