



**SPECS**

## The CastAway®-CTD with profiling and analysis software

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 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.



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

### APPLICATIONS:

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



### 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



# Specifications

To order, or for more information, contact SonTek at [inquiry@sontek.com](mailto:inquiry@sontek.com)

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**ISO 9001**  
**ISO 14001**

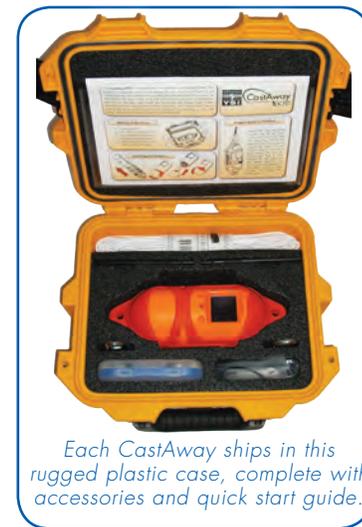
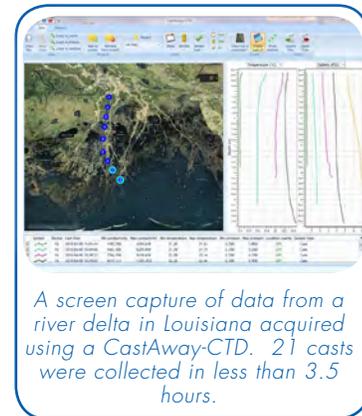
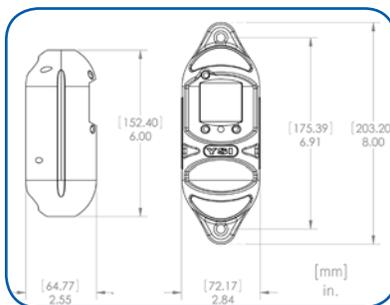
San Diego, California, USA

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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)



## 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 <sup>3</sup>
Sound Speed	1400 - 1730 m/s	0.01 m/s	± 0.15 m/s	Chen-Millero <sup>4</sup>
Density <sup>1</sup>	990 to 1035 kg/m <sup>3</sup>	0.004 kg/m <sup>3</sup>	± 0.02 kg/m <sup>3</sup>	EOS80 <sup>5</sup>
Depth	0 to 100 m	0.01m	± 0.25% FS	EOS80 <sup>5</sup>
Specific Conductivity <sup>2</sup>	0 to 250,000 µS/cm	1µS/cm	± 0.25% ± 5 µS/cm	EOS80 <sup>5</sup>
GPS			10 m	

<sup>1</sup>Based on temperature resolution and accuracy.

<sup>2</sup>Based on 100,000 µS/cm at -5° C.

<sup>3</sup>1978 Practical Salinity Scale.

<sup>4</sup>Chen-Millero, 1977. Speed-of-sound in sea water at high pressures.

<sup>5</sup>International Equation of State for sea water (EOS-80).