



# Pressure Transducer Combined with a Recorder

High resolution and accuracy

## Overview

The CRS456V consists of a submersible water-level and water-temperature sensor with its own time clock and memory to store the collected data—in a compact titanium case. This data logging capability frees users to place the sensor in remote sites and let it collect data for long periods. HydroSci software is included and elegantly supports test

setup, data retrieval, and data display. Long battery life and rugged construction mean you can trust the CRS456V to collect important data. Low cost and ease of use make it a good choice in a variety of applications. The CRS451V is the same as this, but with a stainless-steel case.

## Benefits and Features

- › Rugged titanium case protects piezoresistive sensor allowing it to be used in saltwater and other harsh environments
- › Quality construction ensures product reliability
- › Fully temperature-compensated

## Technical Description

The CRS456V has several pressure range options.

HydroSci software is available for [download](#). This software simplifies the process of configuring the CRS456V. Users can

configure the CRS456V to monitor surface water, ground water, or a standard pump test.

HydroSci software will display the data in tabular or graphical formats.

## Specifications

Venting	Vented
Measurement Time	< 1.0 s
Input Voltage	6 to 16 Vdc
Output Options	micro USB
Internal Data Collection Memory	4 MB

Logging/Scanning Modes	Standard, Delta, Wave, Logarithmic
Resolution	0.0035% FS
Dry Storage Temperature Range	-10° to +80°C WARNING: Sensor could be damaged if encased in frozen ice.

Operating Temperature Range	0° to 60°C WARNING: Sensor could be damaged if encased in frozen ice.
Overpressure	2 x pressure range
Power Requirements	Internal user-replaceable lithium battery
Battery Life	5+ years (when logging interval is once per hour; approximately 40,000 measurements)
Body Material	Titanium
Distance	<ul style="list-style-type: none"> <li>› 2.54 cm (1 in.) Distance from black line etched on housing to end of NPT fitting</li> <li>› 2.3 cm (0.9 in.) Distance from black line etched on housing to end of standard nose cone</li> <li>› 9.9 cm (3.9 in.) Distance from black line etched on housing to end of weighted nose cone</li> </ul>
Water-Level Accuracy	±0.1% full-scale-range TEB Includes the combined errors due to nonlinearity, hysteresis, nonrepeatability, and thermal

effects over the compensated temperature range, per ISA S51.1.

Temperature Accuracy	±0.2°C
Ingress Protection	Exceeds IP68
Diameter	2.22 cm (0.875 in.)
Length	22.23 cm (8.75 in.)
Weight	230 g (0.51 lb)

### Power Consumption

Quiescent	< 80 µA
Measurement/Communication	4 mA (1 s measurement)

### Measurement Ranges at Fresh Water Depths

0 to 5.1 m (16.7 ft)	› 0 to 50 kPa › 0 to 7.25 psi
0 to 10.2 m (33.4 ft)	› 0 to 100 kPa › 0 to 14.5 psi
0 to 20.4 m (67 ft)	› 0 to 200 kPa › 0 to 29 psi
0 to 50.9 m (167 ft)	› 0 to 72.5 psi › 0 to 500 kPa
0 to 102 m (334.5 ft)	› 0 to 1000 kPa › 0 to 145 psi

For comprehensive details, visit: [www.campbellsci.eu/crs456v](http://www.campbellsci.eu/crs456v) 



80 Hathern Road, Shepshed, LE12 9GX UK | +(0)1509 828888 | [sale@campbellsci.co.uk](mailto:sale@campbellsci.co.uk) | [www.campbellsci.eu](http://www.campbellsci.eu)  
 AUSTRALIA | BRAZIL | CANADA | CHINA | COSTA RICA | FRANCE | GERMANY | INDIA | SOUTH AFRICA | SPAIN | THAILAND | UK | USA