

Water Level Measurements

Submersible Pressure Transducers - CS450 and CS455

The Campbell Scientific Submersible Pressure/Temperature sensors, CS450 and CS455, are designed to provide a reliable, accurate pressure (level) and temperature measurement that is fully temperature compensated. The piezoresistive sensor is housed inside a 316L Stainless Steel (CS450) or Titanium (CS455) body and uses a vented cable.

With a 24-bit analog-digital converter built in, the sensor offers mains power frequency rejection and a 0.1% Full Scale accuracy over a 0 – 60 degrees range with measurements controlled by SDI-12 or RS-232 terminal commands. This operation allows the sensor to have a very low current consumption from an input voltage range of 6 – 18V DC.

The CS450/CS455 sensors are available in a number of range options:

- 0-20kPa
- 0-50kPa
- 0-100kPa
- 0-200kPa
- 0-500kPa
- 0-1000kPa



Contact CSA or visit the website for more details:

www.campbellsci.com.au/cs450

www.campbellsci.com.au/cs455

Radar Water Level Measurements

CS475, CS476 and CS477

The CS475/CS476 and CS477 are radar-based distance sensors that can be used to measure the distance from the sensor face to the target, which can be solids or liquids. These sensors emit short microwave pulses and compute the distance to the target from the time taken for the pulses to be reflected.

The CS475/CS476/CS477 operates from a 12V supply and is interfaced to the data logger by SDI-12 which allows the current consumption of the sensor to be minimized. This is particularly useful for sites where power consumption is critical. Proper installation of the sensor is vital to achieving successful measurement and all the sensors have a leveling bubble to make sure the sensor is level. The three models have physically different sizes and measurement footprints. They differ in their measurement range and rated accuracy although they all offer 1mm resolution. Measurement ranges and accuracies are shown in the table below.

Model	Range (mm)	Accuracy
CS475	50 – 20000	+5mm
CS476	50 - 30000	+3mm
CS477	400 – 70000	+15mm



CS475

CS477

CS476

Contact CSA or visit the website for more details:

<http://www.campbellsci.com/cs475-radar-water-level>

<http://www.campbellsci.com/cs476-radar-water-level>

<http://www.campbellsci.com/cs477-radar-water-level>