



**A robust Conductivity and Temperature Probe, designed for easy interface to third party instrumentation**

### **SPECIFICATION**

#### **Sensors**

##### *Conductivity*

Range: 0 to 80mS/cm  
Accuracy:  $\pm 0.01$ mS/cm  
Resolution: 0.002mS/cm

##### *Temperature*

Range:  $-5^{\circ}\text{C}$  to  $+35^{\circ}\text{C}$   
Accuracy:  $\pm 0.005^{\circ}\text{C}$   
Resolution:  $0.001^{\circ}\text{C}$

#### **Sampling**

*Fixed Rates:* 1, 2, 4, 8 or 16Hz  
*Other Rates:* - As fast as possible  
- Data on demand

*System control:* via ASCII control codes or data on power up.

#### **Data Output**

*Format* RS232, RS485 or two analogue channels, selected by user.

##### *Digital*

*Baud rate:* user settable from 2400, 4800, 9600 or 19200

*Protocol:* 8 data bits, 1 stop bit, no parity, no flow control

*RS485:* up to 100 user selectable addresses.

*Data string:* tab separated data in  $\mu\text{S}/\text{cm}$  and millidegrees:  
cccc<tab> $\pm$ tttt<cr><lf>

##### *Analogue*

*Channels:* 2 x analogue voltage outputs

*Range:* 0 to 5v, 0 to 2.5v, -5 to +5v or -2.5 to +2.5v (set by user)

*Impedance:*  $50\Omega$

#### **Power**

*Input:* 9 - 15vDC isolated

*Current drain:* 40mA @ 12vDC

#### **Physical**

*Materials:* Titanium and acetal

*Size:* 30cm x 5.4cm  $\varnothing$

##### *Weight*

Deep version: 1.3kg (air), 0.6kg (water)  
Shallow version: 0.9kg (air), 0.3kg (water)

### **FEATURES**

- Proven Valeport Sensors
- Built in analogue and digital outputs
- Shallow and deep water versions
- Pressure balanced conductivity sensor
- Titanium construction

### **ORDERING**

**0620001** Model 620 CT probe in acetal housing (500m rated). Fitted with PRT and inductive conductivity cell. Supplied with 0.5m pigtail/interface lead, operating manual and spare o-rings.

**0620002** Model 620 CT probe in titanium housing (6000m rated). Fitted with fast response PRT and pressure balanced inductive conductivity cell. Supplied with 0.5m pigtail/interface lead, operating manual and spare o-rings.

### **DESCRIPTION**

The Model 620 CT probe is based on Valeport's proven Conductivity and Temperature sensors, and provides high accuracy real time CT data to other instrumentation packages. Designed with ease of interface in mind, the sensor requires a 12vDC power input, and can output data in RS232 or RS485 digital formats, or as 2 analogue channels. Selection of output mode is made by internal linking on the pcb.

The sensor is available in two versions, for shallow or deep water use. The shallow water version uses a standard Valeport inductive conductivity cell, with a PRT temperature sensor. The acetal housing is rated to 500m. The deep water version features a titanium housing for a 6000m depth rating, together with fast response PRT and Valeport's own pressure balanced inductive conductivity cell.