The Model 106 Current Meter is a lightweight, cost-effective impeller current meter, designed for real-time current measurement or short to medium term autonomous deployments. Titanium construction ensures durability, and the optional temperature and pressure sensors increase the versatility of the instrument. Ideal for use in rivers and coastal applications, or from small boats, the Model 106 is simple to use with either the Windows based PC software supplied, or an optional dedicated display unit.

**Sensors**

**Speed**
- **Type:** High Impact Styrene Impeller
- **Size:** 125mm diameter by 270mm pitch
- **Range:** 0.03 to 5m/s
- **Accuracy:** ±1.5% of reading above 0.15m/s
  ±0.004m/s below 0.15m/s

**Direction**
- **Type:** Flux gate compass
- **Range:** 0 to 360°
- **Accuracy:** ±2.5°
- **Resolution:** 0.5°

**Temperature**
- **Type:** Thermistor
- **Range:** -5 to 35°C
- **Accuracy:** ±0.2°C
- **Resolution:** 0.01°C

**Pressure**
- **Type:** Strain Gauge Transducer
- **Range:** 50, 100, 200 or 500 dBar
- **Accuracy:** ±0.2% Range
- **Resolution:** 0.025% Range

**Data Acquisition**
The current meter works on a basic 1 second cycle, during which the impeller counts are taken and a single compass heading reading is made. From this, East and North velocity vectors are calculated, which are then summed over the averaging period. The additional parameters of temperature and pressure (if fitted) are sampled once every sample period, and averaged over the averaging period.

**Data Recovery**
Direct to PC via communications port. Maximum RS232 data rate of 19200 baud.

**Power**
- **Internal:** 1 x D cell. 1.5v alkaline cell gives approximately 30 days at 10 second sample rate, or 56 days at 5 minute sample rate. 3.6v lithium cell gives approximately 90 days at 10 second sample rate, or 180 days at 5 minute sample rate.
- **External:** For external supply, 12-20v DC is required. Power can also be taken from the Model 8008 CDU.

**Communications**
Fitted with Subconn MC BH10F (Brass) RS232 to PC over cable lengths up to 200m.
Digital Current Loop to Model 8008 CDU, or to PC over longer cable lengths (requires additional adaptor).

**Physical**
**Instrument**
- **Materials:** Titanium, acetal and ABS plastic
- **Size:** 640mm x 50mm Ø tail 133mm wide x 270mm high
- **Weight:** 3kg (air), 2kg (water)
- **Depth Rating:** 500m

**Shipping**
- **Model 106 Size:** 84 x 42 x 39cm
- **Model 106 Weight:** 17kg
- **50m Cable Size:** 42 x 33 x 49cm
- **50m Cable Weight:** 11kg

**Software**
System is supplied with DataLog x2 Windows based PC software, for instrument setup, data extraction and display of tabular and graphical data plots. DataLog x2 is license free.

**Ordering**
- **0106001SC**
  Model 106 Self-Recording/Direct Reading
  Fitted with:
  - Speed and Direction sensors
  - Communications lead (3m Y lead)
  - Switch Cap
  - Software
  - Operating manual, Tool kit and transit case.
- **0106002SC**
  As 0106001SC plus Temperature option
- **0106003SC**
  As 0106001SC plus Depth option
- **0106004SC XX**
  As 0106002SC plus Temperature & Depth
  Note: (XX denotes pressure transducer range)
- **0105005SC**
  Control Display Unit set, comprising deck lead and Model 8008 CDU.