The MIDAS SVP is the most accurate Sound Velocity Profiler in the world. As well as using Valeport’s digital time of flight sound velocity sensor, it now comes as standard with a 0.01% pressure sensor. Every detail from the sensor accuracy through the titanium construction to the large memory and choice of communications methods has been considered - we truly believe it to be the ultimate SVP.

**Sensors**
The MIDAS SVP is fitted with Valeport’s digital time of flight sound velocity sensor, a high accuracy temperature compensated piezo-resistive pressure transducer, and a fast response PRT temperature sensor.

**Sound Velocity**
- **Range:** 1375 – 1900m/s
- **Resolution:** 0.001m/s
- **Accuracy:** ±0.02m/s

**Temperature**
- **Range:** -5°C to +35°C
- **Resolution:** 0.005°C
- **Accuracy:** ±0.01°C

**Pressure**
- **Range:** 10, 50, 100, 300 or 600bar
- **Resolution:** 0.001% range
- **Accuracy:** ±0.01% range

**Data Acquisition**
The MIDAS SVP uses the concept of distributed processing, where each sensor has its own microprocessor controlling sampling and calibration of readings. Each of these is then controlled by a central processor, which issues global commands and handles all the data. This means that all data is sampled at precisely the same instant, giving superior quality profile data.

**Continuous Modes**
- Regular output from all sensors at 1, 2, 4 or 8Hz.
- Regular sampling pattern, where instrument takes a number of readings, then sleeps for a defined time.
- Data is output as a chosen parameter changes by a set value, usually Pressure for profiling.
- Instrument sleeps until a selected parameter reaches a set value.
- Instrument sleeps until predefined start time

**Battery Life**
- <100 hours operation (alkaline)
- <250 hours operation (lithium)

**Connector:** Subconn Titanium MCBH10F

**Physical**
- **Materials:** Titanium housing, polyurethane & carbon composite sensor components, stainless steel (316) deployment cage
- **Depth Rating:** 6000m (may be limited by pressure sensor)
- **Instrument Size:** 88mmØ x 665mm long
- **Cage Size:** 750 x 140 x 120mm
- **Weight (in cage):** 11.5kg (in air), 8.5kg (in water)
- **Shipping:** 100 x 18 x 49cm, 24kg

**Software**
System is supplied with DataLog Express Windows based PC software, for instrument setup, data extraction and display. DataLog Express is license free.

**Ordering**
- 0650003-XX MIDAS SVP Profiler, supplied with deployment cage, Subconn switch plug, 3m communications lead, USB adaptor, DataLog Express software, manual, tool kit and transit case.
- 0400002 16 Mbyte memory upgrade (max 64 Mbyte)
- 0400EA5 FSK modem adaptor
- TB0400FSK Probe board set required for FSK operation

Datasheet Reference: MIDAS SVP version 2C, June 2013