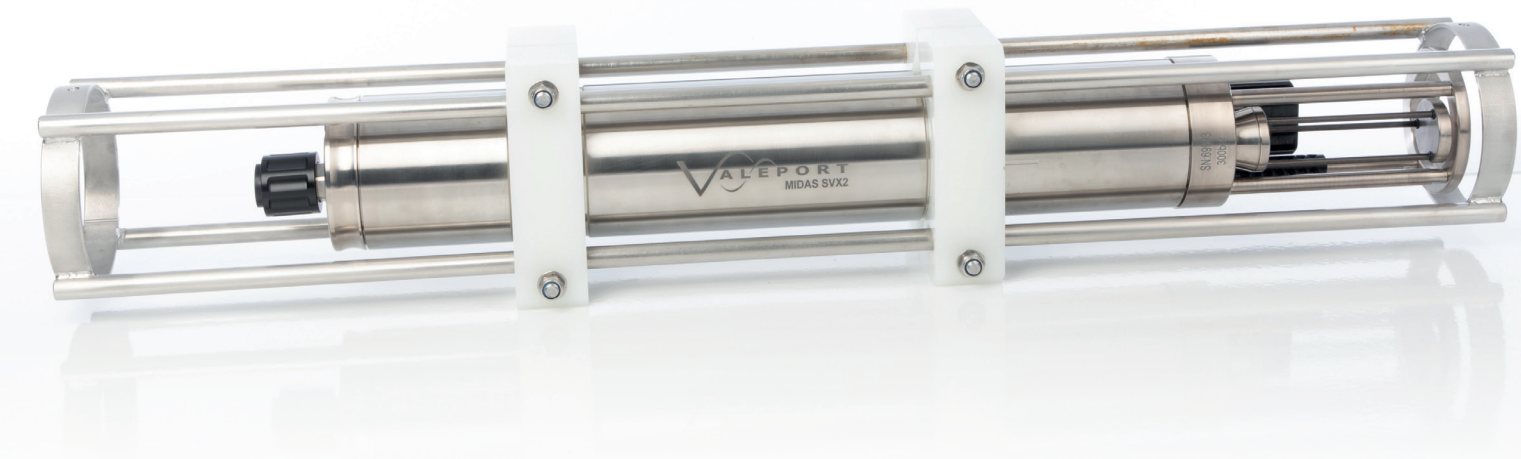

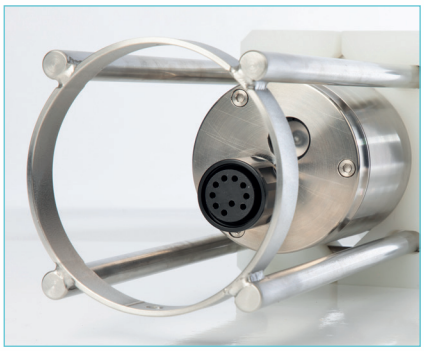

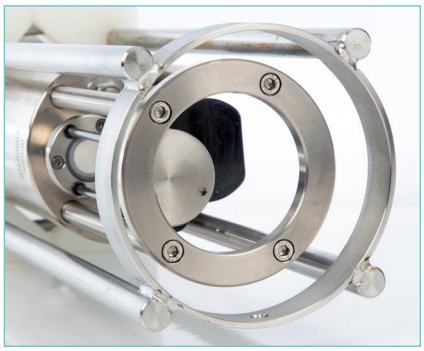

MIDAS SVX2

The MIDAS SVX2 is the standard for the offshore Oil & Gas industry. Recognising the conflict faced by users requiring the superior Sound Velocity data from an SVP, but still needing the Salinity and Density data from a CTD, the Midas SVX2 combines both technologies to give the best of both worlds.

Fitted with a 0.01% pressure sensor as standard, the SVX2 also uses synchronised sampling to ensure perfect profiles, and since the digital time of flight SV sensor is the most accurate in the world, it's also possible to compare the true sound velocity data with that generated by commonly used equations.

DATA SHEET

Product Details

CTD

SOUND SPEED

DATALOG X2 SOFTWARE

Valeport Limited
St. Peter's Quay, Totnes,
Devon TQ9 5EW United Kingdom

Telephone: +44 (0) 1803 869292
Email: sales@valeport.co.uk
www.valeport.co.uk

VALEPORT

Sensors

The MIDAS SVX2 is fitted with Valeport's digital time of flight sound velocity sensor, high stability conductivity 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

Conductivity

Range	0 - 80 mS/cm
Resolution	0.003mS/cm
Accuracy	±0.01mS/cm

Temperature

Range	-5°C - +35°C
Resolution	0.005°C
Accuracy	±0.01°C

Pressure

Range	10, 20, 30, 50, 100, 200, 300, 400 or 600 Bar
Resolution	0.001% range
Accuracy	±0.01% range

Data Acquisition

The MIDAS SVX2 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.

Sampling Modes

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

Electrical

Internal	8 x C cells, 1.5V alkaline or 3.6V lithium
External	9 - 30V DC
Power	0.7W (sampling), <1 mW (sleeping)
Battery Life	<100 hours operation (alkaline) <250 hours operation (lithium)
Connector	SubConn Titanium MCBH10F

Software

System is supplied with DataLog X2 Windows based PC software, for instrument setup, data extraction and display. DataLog X2 is licence free.

Communications

The instrument will operate autonomously, with setup and data extraction performed by direct communications with PC before and after deployment. It also operates in real time, with a choice of communication protocols for a variety of cable lengths, all fitted as standard and selected by pin choice on the output connector:

Standard

RS232	Up to 200m cable, direct to serial port via USB adapter
RS485	Up to 1000m cable, addressable half duplex communication

Optional FSK

2 wire power & communications up to 6000m cable (cable dependent)

Baud Rate	2400 - 115200 (FSK fixed at 19200, USB 460800)
Protocol	8 data bits, 1 stop bit, No parity, No flow control

Memory

The MIDAS SVX2 is fitted with 16Mb solid state non-volatile FLASH memory. Total capacity depends on sampling mode; continuous & burst modes have a single time stamp at the start of the file, trip mode (profiling) stores a time stamp with each reading. A single line of SVP data uses 10 bytes, and a time stamp uses 7 bytes.

Continuous	>1,600,000 data points
Profile	>980,000 data points (>80 profiles to 6000m)

Physical

Materials	Titanium housing, polycarbonate & composite sensor components, stainless steel (316) cage
Depth Rating	Up-to 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 guide	100 x 18 x 49cm, 24kg

Ordering

0650010-XX	MIDAS SVX2 Profiler Supplied with: · Deployment cage · SubConn switch plug · 3m communications lead · USB adaptor, DataLog x2 software · Manual , tool kit and transit case
Note	XX denotes transducer range Select from 10, 20, 30, 50, 100, 200, 300, 400 or 600 Bar
0650010-XX-FSK	Midas SVX2 with FSK option
0400002	16 Mbyte memory upgrade (max 64 Mbyte)

Datasheet Reference: MIDAS SVX2 | April 2020