



# Temperature-Profiling Drifting Buoys

## SVP-TC80/40H, SVP-BTC80/40H

### Functionality

Monitoring of the vertical temperature distribution within upper ocean layer, sub-surface currents and air pressure with data transmission through satellite. The buoys are equipped with underwater Holey Sock drogue and digital temperature-profiling line (thermoline) with profiling depth down to 80 m.

### Sensors

#### Position data (GPS/Glonass)

GNSS receiver GlobalTop Titan3  
 Additionally Doppler effect  
 Argos or Iridium

#### Water temperature profile

Range -5 to +35°C  
 Accuracy +/- 0.1°C  
 Resolution 0.04°C  
 Number of sensors 17  
 Profiling depth 80 m

#### Air pressure (SVP-BTC80/40H)

Range 850 to 1050 hPa  
 Accuracy +/- 1 hPa  
 Resolution 0.1 hPa

#### Measurement interval

hourly

#### Sensors activation

at round hours

### Communication

Satellite system Argos or Iridium

### Operation

Environment temperature -10 to +50°C  
 Lifetime 24 months at least

### Construction

Battery alkaline  
 Activation switch removable magnet

#### Hull

Body fiberglass plastic  
 Diameter 41 cm

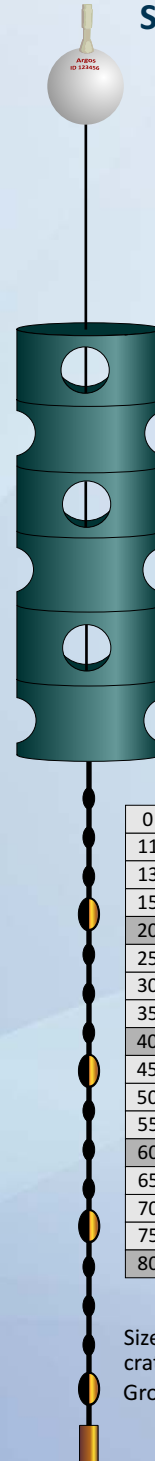
#### Drogue

Type Holey Sock  
 Depth 12.5 m  
 Height 5.5 m  
 Diameter 0.9 m

#### Thermoline

Deviations monitoring by measurements of hydrostatic pressure  
 Diameter 15 mm (line)  
 20 mm (temp. sensor)  
 60 mm (pres. sensor, ballast)  
 DAR<sup>(1)</sup> 6.5 at least  
 Weight 50 kg

### SVP-BTC80/40H



Sensors depths <sup>(2)</sup>

|      | Temperature | Hydrost. press. |
|------|-------------|-----------------|
| 0 m  | +           |                 |
| 11 m | +           |                 |
| 13 m | +           |                 |
| 15 m | +           |                 |
| 20 m | +           | +               |
| 25 m | +           |                 |
| 30 m | +           |                 |
| 35 m | +           |                 |
| 40 m | +           | +               |
| 45 m | +           |                 |
| 50 m | +           |                 |
| 55 m | +           |                 |
| 60 m | +           | +               |
| 65 m | +           |                 |
| 70 m | +           |                 |
| 75 m | +           |                 |
| 80 m | +           | +               |

Size of shipping crate 100 x 90 x 60 cm  
 Gross weight 58 kg

<sup>(1)</sup>DAR (Drag Area Ratio) - ratio of drogue drag area to the total drag area of non drogue elements of drifter

<sup>(2)</sup>The number and location of sensors can be changed by agreement with the customer

