



**OCEANETIC** (2011) Ltd.  
**MEASUREMENT**

# IceTemp Profiler

## DRIFTER SPECIFICATION

[oceanetic.com](http://oceanetic.com)

Oceanetic Measurement Ltd. manufactures ice-tracking instruments and a through-ice temperature profiler, all of which report ice position and movement in near real-time. Internal sensors provide information regarding instrument status and battery condition. Sample rates and device reporting intervals can be remotely programmed to vary operating durations. Oceanetic offers our IceDrift trackers and IceTemp profiler clients data aggregation services for their data such as data logging, processing & hosting. All Oceanetic instruments are designed to endure long deployments in harsh arctic and antarctic conditions.



**Dimensions:** Housing is 105cm tall, with 50cm of buoy, including floats, above ice surface upon deployment. Thermistor chain extends 2M below ice surface.

**Deployment:** 2M deep 8" hole in ice - stabilizer arms provide accurate alignment

**Weight:** 11.5 Kg

**Housing:** white PVC & Stainless latches

**Temperature:**

- Operating range: -40C to +40C
- Air & surface thermistors measurement range: -40C to +25C
- In-ice thermistors measurement range: -25 C to + 25C
- Accuracy: Standard = 0.1°C. Calibration service available up to 0.01°C.

**Thermistor Positions:**

- Air: 0.5 metres above surface
- Ice surface: -0.5 m, -1.0 m, -1.5 m, -2.0 m
- Custom thermistor spacings available, up to 16 temperature channels

**Batteries**

- 9.6 Volt alkaline, 67 AH
- Field replaceable.
- 1 year battery life @10 min. sample rate in Arctic conditions

**Power consumption**

- Standby: 130 uA
- GPS on: 40 mA
- Iridium Transmit: 125 mA

**Position accuracy:** < 5 metres (50%), < 8 metres (90%)

**Sample rate:** remotely programmable increments (5min. - 24 hr.)

**Data format:**

- Packed binary
- 37 byte packet holds 6 temperatures & timestamps
- transmitted once per temperature sample
- Includes timestamp, latitude, longitude, GPS HDOP, board temperature, battery voltage, tilt angle, leak detector status

**Data transmission:**

- Iridium satellite, data delivery by email attachment
- Custom data processing services available
- All received data backed up at Oceanetic Measurement

*Oceanetic Measurement (2011) Ltd. designs & manufactures robust scientific monitoring equipment & provides services for worldwide research into changing oceans, ice caps & fresh water systems.*

1695 Mills Road, N. Saanich, BC, Canada V8L 5S9 +1 250-656-0535 | [info@oceanetic.com](mailto:info@oceanetic.com)