

# Ice Beacon

Ice Beacons are designed to measure temperature and conductivity (to derive salinity) of sea water. They consist of a surface unit, a sensor cable outfitted with two CT sensors in selected depth (in our case one in 5 and one in 10 m depth).



## Buoy description

Manufacturer:	MetOcean, Halifax, Canada
Manufacturer's name:	Ice Beacon CT
Data provider	JouBeh Technologies, Halifax, Canada
Weight	approx. 41 kg
Deployment type	Installation on sea ice with sensor cable hanging through a 10cm diameter hole

## Technical Details

Measured parameters	Sensor
- Body temperature (°C)	YSI 44032 (accuracy $\pm 0.5^{\circ}\text{C}$ )
- Water temperature (°C)	SBE 37IM (accuracy $\pm 0.002^{\circ}\text{C}$ )
- Conductivity	SBE 37IM (accuracy $\pm 0.0003 \text{ S/m}$ )
- GPS position	Jupiter 12 (Navman) (accuracy: $\pm 10 \text{ m}$ )
Measurement interval	Half-hourly
Data transmission	Half-hourly
Data transmitter	Iridium 9602 SBD Transceiver
Power supply	Lithium batteries (life time $>1 \text{ year}$ )