

Polar Area Weather Station (PAWS)



The *Polar Area Weather Station* (PAWS) is designed to be installed on an ice floe, measuring air and surface temperature, barometric pressure, relative humidity, as well as wind speed and direction at approx. 2m height. The platform reports GPS position and atmospheric data via Iridium.



Buoy description

Manufacturer:	MetOcean, Halifax, Canada
Manufacturer's name:	PAWS
Data provider	JouBeh Technologies, Halifax, Canada
Weight	approx. 65 kg
Deployment type	Installation on sea ice through 25 cm hole

Technical Details

Measured parameters	Sensor
- Air and surface temp. (°C)	YSI 44032 (accuracy $\pm 0.1^\circ\text{C}$)
- Wind speed (m/s)	RM Young #05103AP anemometer (accuracy ± 0.3 m/s)
- Wind direction (deg)	RM Young #05103AP anemometer and PNI TCM2.5 compass (accuracy ± 3 deg)
- Relative humidity (%RH)	HMP155 (Vaisala) (accuracy: ± 3 %RH)
- Barometric pressure (hPa)	PTB110 (Vaisala) (accuracy: ± 1 hPa) or equivalent
- GPS position	Jupiter 32 (Navman) (accuracy: ± 2.5 m)
Measurement interval	MET data hourly, GPS updated every 3h
Data transmission	Hourly transmit
Data transmitter	Iridium 9602 SBD transceiver
Power supply	Lithium batteries (life time >1 year)