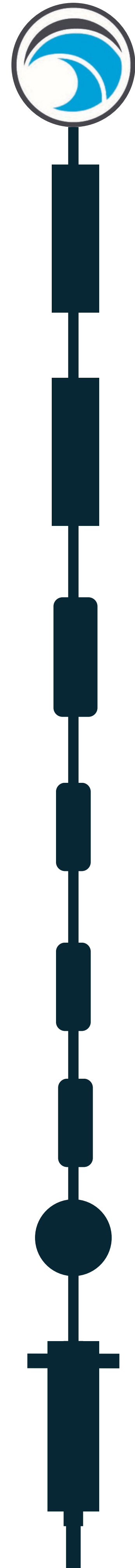


CMAR COASTAL MONITORING PROGRAM REFERENCE SHEET

WATER QUALITY SENSOR DETAILS

The Centre for Marine Applied Research (CMAR) collects high-resolution coastal data on Essential Ocean Variables (EOVs) through the Coastal Monitoring Program (CMP). This program aims to support science-based development of coastal industry, guide government policy and management decisions, encourage environmental stewardship, and monitor coastal ecosystem change. Through the Water Quality branch of the program, CMAR maintains several hundred oceanographic sensors deployed throughout coastal Nova Scotia. This table describes the characteristics of the primary sensor types used to collect Coastal Monitoring Program Water Quality data.



Sensor Type	Manufacturer	Variables Measured	Operational Range	Sensor Accuracy	Battery Lifespan	Storage Capacity	Approximate Cost
aquaMeasure DOT	Innovasea	Temperature, Dissolved Oxygen, Sensor Depth (s/n starting in 675 only)	Temperature: -5 to 35°C Dissolved Oxygen: 0 to 150% Depth: 0 to 100 m	Temperature: 0.2°C Dissolved Oxygen: 5% Sensor Depth: 1.5 m	6-12 months	64 MB flash memory (1,000,000+ Records)	\$3,100
aquaMeasure SAL	Innovasea	Temperature, Salinity	Temperature: -5 to 35°C Salinity: 0 to 75 PSU Depth: 0 to 100 m	Temperature: 0.2°C Salinity: 1 PSU	6-12 months	64 MB flash memory (1,000,000+ Records)	\$3,100
Hobo DO U26-001	Onset	Temperature, Dissolved Oxygen	Temperature: -5 to 40°C Dissolved Oxygen: 0 to 30 mg/L Depth: 0 to 100 m	Temperature: 0.2°C Dissolved Oxygen: 0.2 mg/L up to 8 mg/L; 0.5 mg/L from 8 to 20 mg/L	3 years (6 month DO sensor cap lifespan)	64 KB total memory (43,400 records)	\$1,900
Hobo Temp U22-001	Onset	Temperature	Temperature: -40 to 50°C Depth: 0 to 120 m	Temperature: 0.21°C	6 years	64 KB total memory (42,000 records)	\$275
Vemco VR2AR	Innovasea	Temperature, Sensor Depth, Acoustic Detections	Temperature: -5 to 40°C Depth: 0 to 500 m	Temperature: 0.5°C Sensor Depth: 1.5 m Acoustic Detections: Condition Dependent	14 months	16 MB non-volatile flash memory (~1,600,000 records)	\$5,300
Vemco VR2AR-X	Innovasea	Temperature, Sensor Depth, Acoustic Detections	Temperature: -5 to 40°C Depth: 0 to 500 m	Temperature: 0.5°C Sensor Depth: 1.5 m Acoustic Detections: Condition Dependent	26 months	32 MB non-volatile flash memory (~3,000,000 records)	\$5,300