

AKVA Environmental Sensors

Insight to real-time environmental factors ensures correct farming decisions.

Feed accounts for 60 - 90 per cent of the production cost in most fish farming today. That makes every pellet count when it comes to financial results.

To know the environmental data, such as temperature, oxygen, salinity, pH and current speed and direction, is important for making the correct farming decisions.

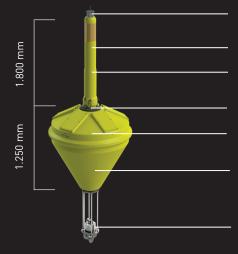
Temperature is the foundation for feeding and growth models. Temperature sensors always provide accurate real-time readings of the temperature conditions for the fish and are key data for correct feeding. Oxygen is another key parameter as oxygen data helps you pick the correct time for feeding. The system will also stop feeding at low oxygen levels in the water. A third parameter is current. When the current becomes too strong, the feeding will stop to prevent feed loss.

Make informed decisions based on real-time data and analysis of logged data through monitoring. AKVA group provides the insight you need to optimize production.





AKVA Oceanographic Sensor Buoy



Synchronized yellow signal light with flashing pattern and light intensity according to the Norwegian Coastal Administration's recommendations Mast with yellow reflector and integrated radar reflector

The antenna allows for two-way communication with different data transmission setups

Integrated long-life battery pack

Connection chamber for up to three additional sensors, such as oxygen, temperature and salinity

Foam-filled and impact-resistant PE body in easy visible color

Mooring rig attachment

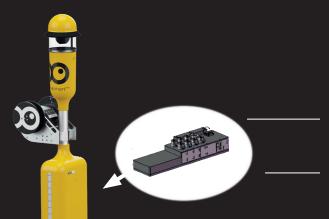
AKVA Oceanographic Environmental Buoy monitors the parameters that allow for early detection of changes in fish and farm condition:

- Direction and velocity of ocean currents
- Information on wave height and wave direction can be valuable for work planning at the pen
- Real-time observation of temperature, oxygen, current and salinity at defined depths
- The data is transmitted wirelessly to the barge by radio communication
- The data is presented in a new and user-friendly web solution that gives a complete overview of both the current picture and long-term trends
- Smart energy solution ensures minimal maintenance: The buoy enters sleep mode between each measurement to ensure long battery life

Configurations:	Available in 4 different configurations with 0-3 oxygen-/temperature sensors
Body specifications:	1.250 mm height / 1.190 mm diameter (largest) / 87 kg 500 kg netto buoyancy Box for 3 InSitu sensors
Mooring rig:	By customer
Mast:	Approx. 1.800 mm above water surface / 32 kg. The mast incl. signal light, radar reflector, electronic control module w/ sensor interface and battery
Light:	10-32V operating voltage Power consumption: 2mW (stand-by power). Light source: Yellow LED Flash pattern: 0c Y 2s GPS data: Position and time, RS232
Battery:	18V / 200 Ah Approx. 1 year lifetime (standard) 19.5 kg
Sensors:	Doppler power profile sensor: Aanderaa/ XYLEM DCPS5400 Oxygen/temperature: InSitu RD0 PR0-X Wave sensor: Seaview Systems SVS-603



AKVA Environmental Station EAP



Collection and logging of environmental data from one or more depths with direct connection to Akvasmart CCS feeding system

A robust and reliable alternative that can be used for both wired and wireless networks

AKVA Environmental Station EAP is the focal point for all environmental sensors and provides a good overview of the conditions in the pen.

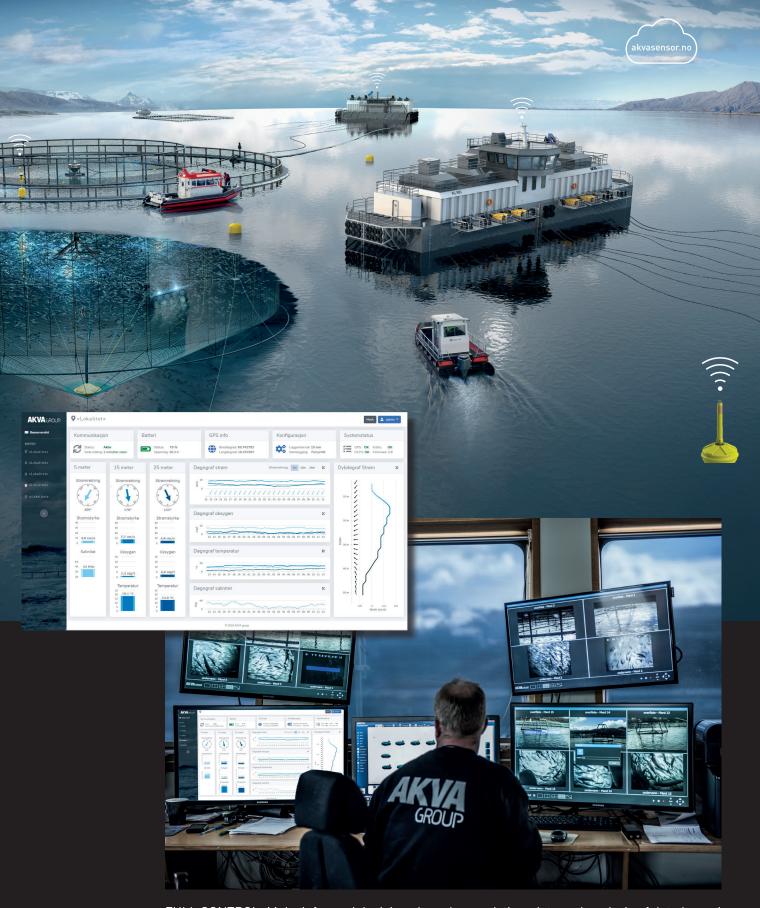
- A robust solution if you want to combine several environmental sensors
- The environmental station connects directly to an Akvasmart CCS feeder, wireless or wired, and includes two-way data communication
- EAP is directly linked to the Akvasmart CCS feeding system via the AKVAconnect software

Sensors:	8 (EAP Mini: 3)
Temperature:	-10°C to + 40°C
Communication:	Wired or wireless
Connections:	Amphenol plugs/direct terminal
Materials:	Fiber glass/Acrylic/Aluminium
Size - LxWxH:	Single: 370x300x170 mm Triple: 560x560x170 mm
Weight:	Single: 5 kg / Triple: 8 kg
Temperature sensor:	Single: 1 pcs / Triple: 3 pcs
Oxygen sensor:	Single: 1 pcs / Triple: 3 pcs
Current sensor:	Single: 1 pcs / Triple: 3 pcs
Extra equipment:	Aluminum protective cap for handrail mounting on pens





- Plug and play with digital CAP
- Connection for 3 sensors (RDO PRO-X, Troll 100, Troll 200, Troll 400)
- Power supply from CAP no external power supply needed
- Placed in CAP well protected from the weather
- NFC chip connected for easier setup and troubleshooting



FULL CONTROL: Make informed decisions based on real-time data and analysis of data logged through monitoring.