

## INTEGRATED SYSTEM

### BUOY Eco EMIS 400

Easy and cheap buoy solution for short monitoring campaign

- Compact, lightweight and easy to deploy
- Remote data system
- Alarm via SMS
- Digital field sensors (RS485/SDI12)
- Consultation of the data on Web Sever
- Measurement up to 8 parameters : Temperature, pH, ORP, Oxygen, conductivity, salinity, turbidity..



### Eco EMIS 400 : Quick and easy solution for water quality monitoring

The **Eco EMIS 400** has been developed by PONSEL to meet requirements of *in situ* water quality monitoring. The **Eco EMIS 400** is a cost effective solution for short campaigns (from few weeks to several months).

Quick and easy to deploy, the **Eco EMIS 400** can be lifted into place by only one person on bridge pilings or piers.

To save unnecessary trips into field and to reduce operating costs, the **Eco EMIS 400** send data on your computer (remote data system inside) with Web server application.

## Economic solution and easy to use

### Quick and easy to deploy

Compact (diameter 40 cm) and lightweight (14 Kg), the **Eco EMIS 400** can easily and quickly deployed into place by only one person from shore or small boat.

The **Eco EMIS 400** can be install near the shore thanks to a very low water depth requirement (< 50 cm).

### Remote data and alert by SMS

The data from PONSEL digital sensors are save in the Logger. The data are available on your computer thanks to a remote data transmission.

## Digital sensors' range :

The DIGISENS sensors allow to control the parameters : temperature, PH/ORP, Conductivity/salinity, Turbidity and dissolved oxygen.

### Robust

Thanks to a 50 years experience in sensor manufacturing, PONSEL provide you a very high quality of instruments for drinking water, wastewater and all field applications

	Dimensions	Parameter	Range	Accuracy	Measurement Principle
pH/ORP/°C	D : 27 mm L : 159 mm W : 350 g (with cable)	Temperature	0,00 to + 50,00 °C	± 0,1 °C	CTN Inox
		pH	0,00 to 14,00 pH	± 0,1	plasticized PONSEL "PLASTOGEL"®. electrolyte Ag/AgCl reference
		ORP	- 1000,0 to + 1000,0 mV	± 2 mV	Platinum electrode Ag/AgCl reference
OPTOD	D : 25 mm L : 146 mm W : 450 g (With cable)	Dissolved Oxygen	0,00 to 20,00 mg/L 0,0 to 200,0 % SAT	± 0,1 mg/L ± 1 %	PONSEL OPTOD optical luminescence technology ASTM D888 – 05Complinance
C4E	D : 27 mm L : 177 mm W : 350 g (with cable)	Conductivity	0,0t to 200,0 µS/cm 0 to 2 000 µS/cm 0,00 to 20,00 mS/cm 0,0 to 200,0 mS/cm	± 1 % full range	C4E Technology 4 electrodes (2 platinum and 2 graphite)
		Salinity	0-60 g/Kg	± 0,5 % full range	C4E Technology 4 electrodes (2 platinum and 2 graphite)
NTU	D : 27 mm L : 170 mm W : 300 g (with cable)	Turbidity	Range NTU : 0,00 to 50,0 NTU 0,0 to 200,0 NTU 0 to 1000 NTU 0 to 4000 NTU Range 0-4500 mg/L	± < 5 % full range	IR 90° technology ISO 7027 compliance

Technical features	
FLOTTEUR	
<b>Dimensions</b>	Diameter buoy 40 cm
<b>Weight</b>	14 Kg (Full)
<b>Material</b>	Polyuréthane – shock resistant
<b>Color</b>	Blue Yellow in option
<b>Mooring</b>	With 1 or 3 points
Datalogger	
<b>Datalogger</b>	Memory capacity 30 000 data
<b>Record frequency</b>	10, 30, 60, 120 s 5, 10, 15, 30 min 1, 2, 3, 4 hours 6, 8, 12 hours
<b>Alert SMS /Mails</b>	4 thresholds by parameter with 4 conditions of crossing .
<b>Transmission</b>	- GSM DATA : frequency 1 sending/day - GPRS towards a Web server and viewable on web page with access code. Frequency of customizable sending. - Remote access of the logger
<b>Software</b>	Configuration of the logger and the communication
Measure unit	
<b>Batteries</b>	12V/ 17Ah State of load recorded with the parameters Possibility to load the battery by an external connector without opening the buoy
<b>Temperature of functioning</b>	- 5°C to + 50°C
<b>Software</b>	To configure the datalogger and the communication
<b>Sensors</b>	Numerical sensors in SDI12 way : - pH /ORP/T°C - Turbidity 0-4000 NTU /FNU - DO (Optical technology) (ppm, mg/L and %Sat) - Conductivity/Salinity/TDS - Temperature
<b>Not supplied</b>	- SIM card for transmission GSM DATA/GPRS with internet acces, - Line of mooring for installation of the buoy
<b>Option</b>	ODEON OPEN ONE for sensor calibration,

