



SALINOMADD

THE RAPID GAUGING IN FEW MINUTES

- Gauging by dilution method
- Takes just a few minutes
- In high flow water courses up to 50,000 l/s
- Operates with cooking salt
- Measures by integrating the salinity
- Non polluting tracer
- 15 freely programmable measuring sites can be stored

SalinoMADD is a complete and simple-to-use device allowing measuring a flow in just a few minutes using the **tracer dilution method**.

This method consists to inject a quantity of salt into the stream and to measure its concentration downstream. The result can be calculated in function of the injected tracer quantity and the concentration measurements.



THE TRACING

The measuring probe is placed into the water course. At a sufficiently large distance upstream so that the tracer mixes perfectly with the water, a known amount of salt is injected, previously diluted in a container with the river water (5 - 20 grams per I/s of estimated flow). The device records the passing of the tracer and provides the flow in litres per second immediately at the end of the operation.

SOFTWARE SALINOMADD

The **SalinoMADD** is delivered with software for PC. Before gauging, 15 measuring sites can be prepared with different information. These data are loaded into the device, either at the office or in-situ with a laptop. It contains amongst others the name of the site, the location, the operator, the measuring interval, the limnimetric height, the amount of injected salt and the injection distance. These last four parameters can be modified on site when acquiring a gauging reading directly using the unit's keyboard.

Site	Site <u>s</u> uivant	
Nom du site VENOGE	Conditions météo BEAU ET CHAUD	Site précédan
Nom du lieu LES ROSEAUX	Hauteur limnigraphique 678 mm 💌	<u>E</u> nregistrer
Nom de l'opérateur A. DUPONT	Quantité de sel	Annuler
Intervalle de mesure	Distance d'injection	Aide

Site Lieu Opérateur Intervalle Salinités		: BASSIN SERRA1 : GALERIE LAGGIN. : BERTHOUZOZ : 8 s initiale : 37 mg/1 de base : 38 mg/1		Hauteur limni. : 250 mm Distance : 3000 m Météo : PLUVIEUX Sel injecté : 50 kg (13 g/1) finale : 39 mg/1 maximale : 118 mg/1		Heuro de début : 10:26:38 Heuro de fin : 11:19:18 Date : 23:05/1996 Débit sur site : 3932 l/s Arrét manuel Acquisition complète									
									119				٨	Date	: 23/05/1996 : 250 mm
									105.					Débit	: 3930 Vs
	90-														
[µ6µ]	76														
6m) e	·~1														
Salinité (mg.	62				1 \										
Salinite (mg/	62 -					(

Back at the office, it offers the opportunity to analyze the graphs and export data as spreadsheet. The visualization of the gauging curves is recommended to ensure that measurements were done correctly or to detect possible errors.

Some tools are available to recalculate the flow after parameters changes and to print the results.

ACCESSORIES

The **SalinoMADD** is supplied with its accessories (sensor with 10 m of cable, PC connection cable, calibration solution, software, etc.) in a rugged case, providing effective protection for the units during transport.



TECHNICAL SPECIFICATIONS

Device	
Gauging range	0,01 l/s to 999'900 l/s (4 significant figures with floating decimal point)
Gauging accuracy	< 5 % (with optimum mix of tracer)
Gauging repeatability	± 1%
Tracer type	Cooking salt (NaCl)
Tracer quantity	1 g to 1000 kg of salt
Tracer ideal mix	Between 5 and 20 g of salt per I/s of estimated flow. (Ex : \sim 300 l/s -> 2 kg)
Supply	4 x 1,5V alkaline batteries, AA, LR6 type
Autonomy	About 30 hours under normal conditions
Communication	Serial link RS-232
Dimensions / weight	Complete case : 450 x 360 x 106 mm / 2,7 kg
	Device with probe : 250 x 120 x 55 mm / 1,6 kg
Waterproof	IP65

Salinity	
Measuring range	Salinity: 0 to 2000 mg/l Conductivity: 0 to 3600 μ S/cm
Sensitivity	1 mg/l
Precision	< 1 %
Temperature	
Measuring range	0 to +40 °C
Precision	± 0,2 °C

MADD*TECHNOLOGIES* can change these specifications without warning