



# EXTENSOMADD

## MEASURING STATION FOR EXTENSOMETER

- Based on the HyMADD devices range
- Measuring precision of 0,1mm
- Calibration, programming and data reading by serial link with UniMADD
- Automatic data transfer by email
- Alerting messages sent by SMS to 3 phone numbers
- Very fast on-site installation

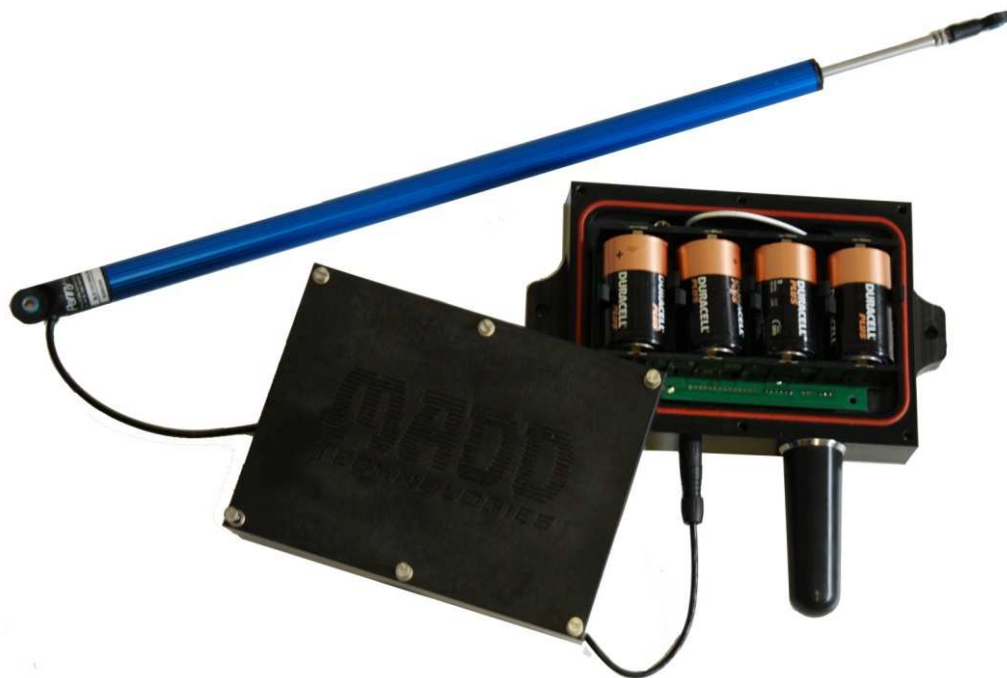
Developed on the base of the device **HyMADD**, this new range of measuring stations was designed specifically for the monitoring of rock instabilities. Indeed, the station is equipped with an extensometer sensor to measure cracks and rock mass movements up to 300 mm and with a temperature sensor. Measurements and data records are done at regular and programmable intervals.

The datalogger is housed in a rugged polyethylene (PE) box adapted for quick installation in cliff. Like the extensometer, it can be fixed easily with two rock anchors.

The control of the station, its programming and the reading of the data are done via the serial link by a PC. The software **UniMADD** was designed in a friendly way to make it as simple as possible.

The **GPRS option** allows you to reduce the number of travels to the field to retrieve the measurements: the **ExtensoMADD** automatically sends data to your email address as attachment.

Finally, with the **SMS alarms option**, alarms can be triggered in case of movement of monitored rocks. The movement detection is done by comparing measurements over time: if the measurements difference exceeds a predefined threshold, a message is sent immediately by SMS on different numbers, followed by data on the email addresses. The repetition of alarms sending is also programmable.



## TECHNICAL CHARACTERISTICS

Station	
Measuring interval	Between 10 seconds and 24 hours
Memory capacity	> 30'000 measurements
Waterproof	IP65
Dimensions	220 x 135 x 84 mm
Power supply	4x 1,5 V LR20
Autonomy (Interval of 10' without GPRS)	From 0 to 20 °C: > 4 years At -10 °C: ~ 2 years
Operating temperature	From -20 to +60 °C
Communication	Serial link RS-232
GPRS module	Option
Alarms by SMS	Option

Probe	
Analog channels number	2 (Distance and temperature)
Protection	IP68
Dimensions	Ø 19 x 510-810 mm
Standard cable length	1 m
Distance	
Measuring range	0 to 300 mm
Linearity	± 0,1 % FS (full scale)
Absolute precision	± 0,1 mm
Temperature	
Measuring range	-30 to +30 °C
Absolute precision	± 0,2 °C

Alarms	
Number of SMS numbers	3 numbers
Number of email addresses	1 email address
Alarms programming:	
- Period of the measurements comparison	10 min to 24 hours
- Alarms repeat	10 min to 24 hours

**MADD TECHNOLOGIES** can change these specifications without warning

## AVAILABLE MODELS

Model	Description
ExtensoMADD	Extensometrical station with 300 mm extensometer
MADD-GPRS	GPRS option for data transmission on email address, with antenna
NIVALARM	Alarm by SMS option, with a programmable adaptive threshold and 3 SMS numbers