



## HYMADD

### SIMPLE AND PRECISE HYDROLOGICAL STATION

- Low cost and compact device
- Precision and reliability of measurements
- 2 or 3 channels (pressure, temperature and conductivity)
- Calibration, programming and station control by serial link with software
- Automatic data transfer by email
- SMS alarm depending programmable thresholds
- Fast onsite installation
- Ideal for the monitoring of rivers, lakes or ground water

Specially designed to use it in hydrology, the **HyMADD** permits the monitoring of the level and the temperature of the water, like of its conductivity in the configuration at 3 parameters.

The device is composed of the probe containing all the electronic and of the upper housing including the batteries and the connector of communication. Small and well integrated, it can be installed really easily and in few times in almost all situations.

In its basic version, the upper case of the **HyMADD** is adapted for piezometric pipes of 2" and is fixed using 3 screws (picture n°1). In grey PVC, it looks like a simple tube stopper and remains very discrete. It is enough to unscrew the lid to reach the connector of communication and the batteries, or to do manual measurements through the hole of passage (Ø 16mm) arranged for this purpose.

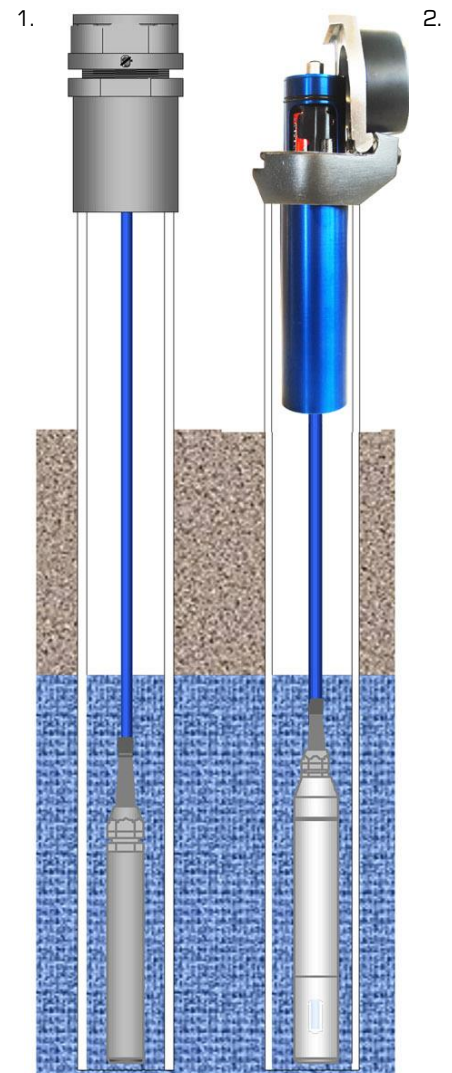
However, to palliate the risks of vandalism, interior aluminium housing was developed to fit inside piezometric pipes of 2" and more (picture n°2). Fixed using a sleeve, it can be protected by a safety-lock cover. In this case, the connector of communication is on the lid, which protects the batteries.

The third special solution in a rectangular box is available for the assembling in cupboard or in table (picture n°3).

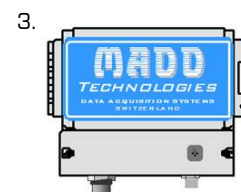
The station control, its programming as well as the recovery of the data is done by serial communication using a laptop. The software **UniMADD** was conceived in a convivial way to simplify its use as much as possible.

Thanks to the **GPRS option**, it is not necessary any more go frequently on the field to recover measurements, the **HyMADD** automatically sends the data at your email address as attachment.

Finally, with the **Alarm option**, 2 threshold levels (ascent or descent) can be programmed and SMS messages will be sent at overruns of these levels. Unavailable on devices **HyMADD3**.



3 housings & 2 types of probes for 6 different configurations!



## TECHNICAL CHARACTERISTICS

Housing	Exterior (-E)	Interior (-I)	Rectangular (-B)
Measuring interval	Between 10 seconds and 24 hours		
Acquisition modes	Stop – Measurements		
Memory capacity (non volatile)	> 60'000 measurements (1 measurement per parameter)		
Housing protection	IP64	IP65	IP65
Housing dimensions	Ø 80 x 225 mm	Ø 50 x 160 mm	166 x 161 x 93 mm
Power supply	3x 1,5 V LR6	4x 1,5 V LR6	4x 1,5 V LR20
Autonomy (Interval of 10' without GPRS)	0 to 20 °C: > 2 years At -10 °C: ~ 1 year		0 to 20 °C: > 4 years At -10 °C: ~ 2 years
Operating temperature	From -20 to +60 °C		
Communication	USB		
Anti-vandal protection (option)	No	Safety-lock cover	Housing
GPRS Transmission (option)	Yes		

Probe	HyMADD	HyMADD3
Channel number	2 (Pressure and temperature)	3 (Pressure, temperature and conductivity)
Protection	IP68	IP68
Dimensions	Ø 25 x 200 mm	Ø 33 x 250 mm
Operating temperature	0 to +60 °C	0 to +60 °C
Standard cable length	10 m (Other on demand)	10 m (Other on demand)
<b>Pressure</b>		
Measuring range (to specify)	0 to 1, 2, 5, 10, 20 mH2O	0 to 1, 2, 5, 10, 20 mH2O
Overpressure	2x nominal pressure	2x nominal pressure
Linearity	± 0,1 % FS (full scale)	± 0,1 % FS (full scale)
Relative precision	± 0,5 % FS	± 0,5 % FS
<b>Temperature</b>		
Measuring range	0 to +60 °C	0 to +60 °C
Absolute precision	± 0,2 °C	± 0,2 °C
<b>Conductivity</b>		
Measuring range	N/A	0 to 2000 µS
Relative precision	N/A	± 1 % FS (0-1000 µS) ± 2 % FS (0-2000 µS)

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

## AVAILABLE MODELS

Model	Description
HyMADD-E	Measuring station with 2 parameters
HyMADD-I	Measuring station with 2 parameters, interior housing
HyMADD-B	Measuring station with 2 parameters, rectangular housing for cupboard
HyMADD3-E	Measuring station with 3 parameters
HyMADD3-I	Measuring station with 3 parameters, interior housing
HyMADD3-B	Measuring station with 3 parameters, rectangular housing for cupboard
MADD-GPRS	GPRS option for data transmission on email address, with antenna
NIVALARM*	Alarm by SMS option, with 2 programmable thresholds and 3 SMS numbers

\* This option is not available with HyMADD3 models