

Orpheus Mini

Applications

Groundwater Level Aquifer Characterization Groundwater Recharge Mining Hydro Fracturing Drinking Water Flooding Dam see page Surface Water Level



Ground water data logger

Pressure probe with integrated temperature sensor and data logger

Easy installation in observation wells of 1" diameter and larger by adapter plates or suspension bracket

Power supply can optionally be provided by Lithium or Alkaline batteries

The batteries can easily be changed on-site

Longitudinally stable pressure probe cable by Cevlar core

Saltwater resistant casing material

Easily equipped for data transmission using GSM/GPRS/SMS

Monitoring and Storage

The ground water data logger OTT Orpheus Mini has been designed for the reliable monitoring and storage of water level and temperature. The main application of OTT Orpheus Mini is the installation in ground water pipes and wells. In addition, the application in open waters and tanks is possible.

Rugged and Precise

OTT Orpheus Mini is equipped with a rugged, ceramiccapacitive measuring cell and a precise temperature sensor. A data logger, which can be configured individually, stores and manages the monitored measured values in a 4 MB nonvolatile memory (corresponds to approx. 500,000 measured values). The power supply of the OTT Orpheus Mini as well as the connexion for downloading data and start-up are provided by the communication unit.

Intuitive

The infrared interface allows the data to be conveniently read out or transferred from the device with a notebook or a Pocket PC. A well structured, intuitive operating program with all the necessary functions for data output and export, configuration and calibration is supplied.



Technical Specifications

	Feature	Value
MEASUREMENT	Measuring ranges, pressure	0 4 m, 0 10 m, 0 20 m, 0 40 m, 0 100 m water column
	Resolution, pressure	0.01 % FS
	Accuracy, pressure	± 0.05 % FS
	Longterm stability	± 0.1 % / year FS
	Temperature-compensated working range	- 5 °C + 45 °C (ice-free)
	Measuring range, temperature	- 25 °C + 70 °C (ice-free)
	Resolution, temperature	0.1 °C
	Accuracy, temperature	±0.5 °C; optional 0.1 °C
ELECTRICAL DATA	Power supply	3 x 1.5 V LR6/FR6-cells, Lithium type
	Lifetime (at 1 h sample interval)	With Lithium batteries min. 5 years
INTERFACE	Interface	Infrared (IrDA)
MEMORY	Memory	4 MB
	Number of measured values	Approx. 500,000
	Sample / Storage interval	1 second 24 hours
GENERAL	Installable in observation wells	With adapter plates for OTT top caps 1", 2", 4", 6"
		With suspension bracket $\ge 1''$
	Storage temperature	- 40 °C + 85 °C
DIMENSIONS & WEIGHT	Dimensions L x Ø	Communication unit 400 mm x 22 mm
		Pressure probe 195 mm x 22 mm
	Weight	Communication unit (incl. batteries) approx. 0.410 kg
		Pressure probe approx. 0.300 kg
	System length	(cable length incl. communication unit/pressure probe) 1.5 200 m \pm 0.25 m
MATERIAL	Material of casing	ABS, stainless steel (DIN 1.4539, 904L)
ENVIROMENTAL CONDITIONS	Type of protection	Communication unit IP 67 (immersion depth max. 2 m, duration of immersion max. 24 h)
		Pressure probe IP 68
EMC/EMI AND NORMS	EMV limits	IEC61326/EN61326 are complied with



