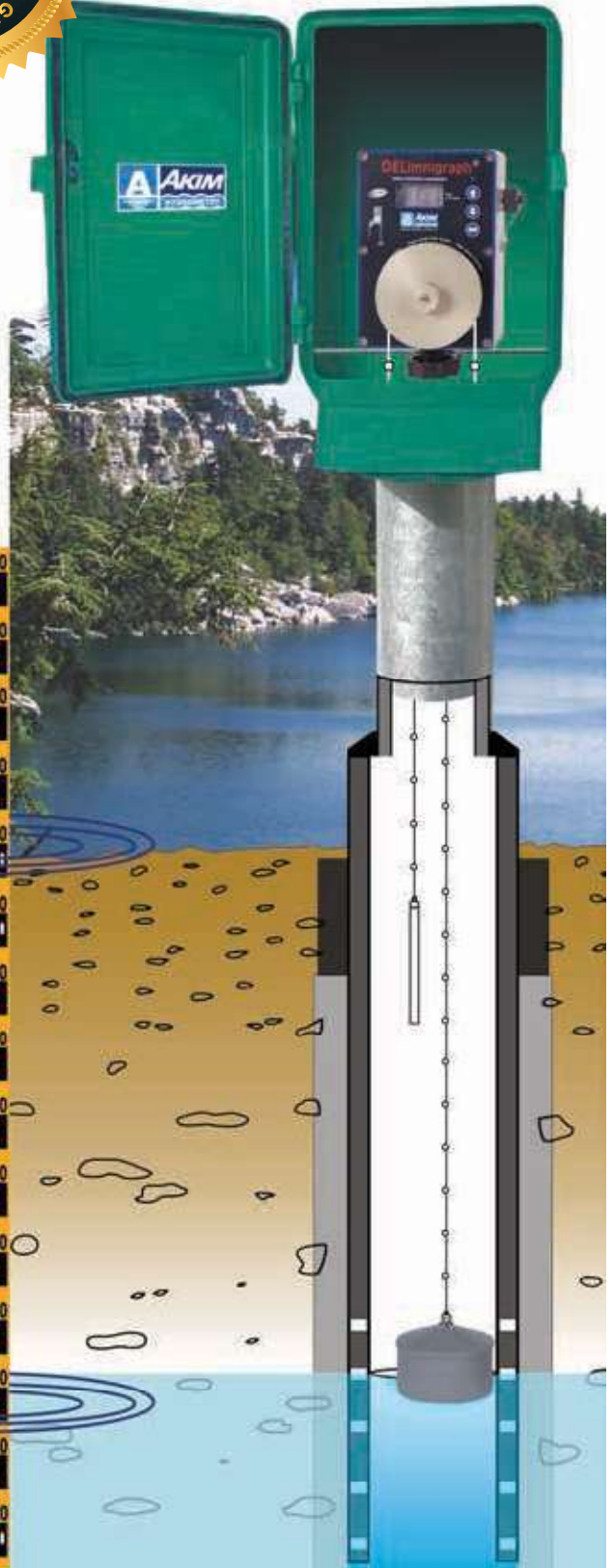


WATER LEVEL RECORDER WITH SHAFT ENCODER **OEL-104**



Water Level Recorder (OEL-104) is used for the continuous monitoring, logging and storage of ground water level and surface water level. (System works accurately on rivers, irrigation channels, dams, lakes, land drainage, ground-water wells and flood control monitoring).

With a float-operated shaft Encoder OEL-104, a new generation in water-level measuring technology has been achieved.

- Proven **AKIM HYDROMETRY** quality with competing prices.
- 3-lines, dot matrix LCD display, each 12 characters. (Water Level, time, date, battery-status, alarm status, setup and measured values)
- RS232 interface for bi-directional data transfer via serial modem,
- GSM data modem, GPRS data modem, radio modem, flash card, Palm top, satellite, etc.
- Battery life-time > 10 years. No battery change necessary.
- Built-in LCD display for water-level indication in "cm", "mm" or "inches"
- Communication Ports: RS232 interface, RS485 interface SDI-12 interface and USB.
- 256 KByte Ring Memory, EEPROM
- Keypad or remote setup
- Windows Data Management Software
- Easy installation
- 3 years warranty



Data Logger

OEL-104 Optic / Shaft Encoder

Type	Floating
Memory	256 KByte (Ring Memory), EEProm
Memory Storage Mode	Circle Mode (cyclic over writing old data)
Memory Storage Capacity	Storage capacity of data over approximately 15 years at a storage interval of 1 hour
Storage of	Water Level, Real time and date, alarms, manual correction of data (observer) with time and date, observer records. During readout, the sampling process is not interrupted
LCD Display	3-lines dot matrix LCD Display, each 12 characters. Displays actual water level, date/time, Level alarms, storage memory, sampling interval, min./max. value, last battery change, last readout and setup parameters, error messages and measured values. 15 sec. auto shut off
Keypad	3 keys. Built - in touch keypad for operation and set up over keypad
Data Transfer Rate	19200 bps (9600 bps selectable) Flash card Option: 115200 bps
Communication	RS 232 interface via: Desktop Computer, Notebook, Telephone Line Modem, GSM Data Modem, GPRS Data Modem (TCP/IP), Palm top, Flash Card (2 MByte), RF modem (optional) and Satellite (optional)
Communication Ports	RS232 Interface, RS485 Interface, SDI-12 Interface and USB
Power Supply	Single 3.6 Volt DC, 8500 mAh. C size Lithium Battery
Battery Life - Time	> 10 years (No battery change necessary)
Sensor Access	24 hour time, accuracy approx. ± 1 minute per month
Real Time Clock	Quartz - controlled real-time clock. Automatic leap year calculation
Interval time	The sampling and logging intervals can be preset (from 1 minute to 24 hours)
* SMS Alarm Signals	High level alarm, Low Level alarm, rate alarm and battery alarms by SMS messages sent to GSM cellphones and PC's (incoming alarms are automatic from measuring stations)
* SMS Messenger	Text "AKIM LEVEL" and send to Limnigraph side to Cellphones modem and receive "SMS LEVEL" on your cell-phone
Read Out Unit	4...20 mA, 0 - 5 V, 0 -10 V outputs
Protected Data	No data loss even if Battery fails, data stored in EEPROM memory.
Protection	Not affected by humidity and dust (IP67 protection)
Working Temperature	- 30 °C to + 80 °C
Storage Temperature	- 40 °C to + 85 °C
Humidity	98 % relative

* GSM /GPRS Modem Function

Sensor	Light Pulse Scan Optical Encoder. Accurate and incremental reading on logger. 128 definable sectors and 7 tours
Principle	Optical scanning 1 turn absolute, multiple turns summing
Light Source	IR LED Array
Resolution	1 mm (2 mm, 1 cm-scalable)
Measuring Range	0 to 655 m max. 1 mm for 0-130 m range 1 cm for 0-655 m range
Accuracy	± 1 mm
Wheel perimeter	256 mm = 25.6 cm per turn
Shaft diameter	7 mm
Shaft - Load	Radial = 5 kg (50 N) Axial = 1 kg (10 N)
Switchable	Built in LCD Display for water level indication in "cm" or "mm" (scalable)
Sense of rotation	Left-hand or right-hand rising view on display
Working Temperature	- 30 °C ile + 80 °C
Storage Temperature	- 40 °C ile + 85 °C
Case	Pressure Cast Aluminium, size: (170x120x55mm)
Housing of shaft Encoder	IP67 protection.(humidity and dust)
Humidity	98 % relative
Weight	Approx. 1,5 kg.

Accessories

Float	Diameter:120 mm,Length:100 mm,Weight:540 gr.
Counter Weight	Diameter:20 mm, Length:90 mm, Weight:180 gr.
For Float Cable	Diameter:1 mm. Stainless steel float cable. Converts water level changes into a rotation