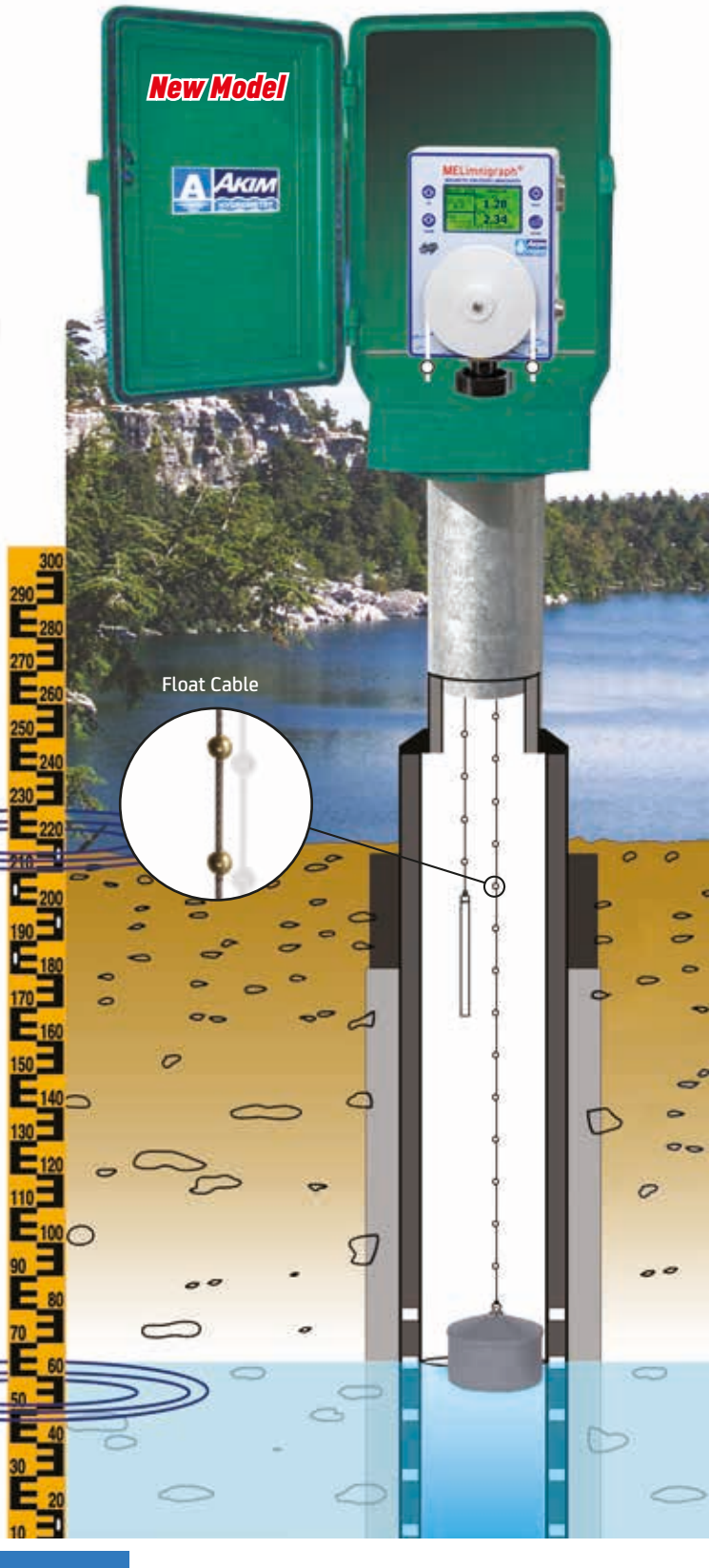
Water Level Recorder

AKIM HYDROMETRY

MEL-200



- **MEL-200** Limnigraph is used in rivers, dams, lakes, irrigation canals, flood controls, waste water management, coastal design, underground wells and environmental studies for water level measurements.
- **MEL-200** automatically stores water level measurement in the desired recording interval and also MEL-200 has RS-485, 4...20 mA and RS-232 outputs. The data can be transferred from the RS-232 port and USB port of the Limnigraph to the computer in excel, xml and text file formats. If the modem is connected, it can be transferred to remote computer in excel, xml and text file formats. This data can be viewed graphically through the program.
- Data logger's LCD display shows water level, date and battery values instantly. Parameter values can be changed and offset values can be adjusted via keypad.
- When the display is activated by pressing the up button, the display shows the instantaneous water level value. Flow and volume information can be reached with up and down keys.
- With the laptop, modem and keypad: Station Number, Station Name, Basin Number, Zone Number, Equal Level, Date and Time, Data Record Interval identification operations can be performed. The Level vs. Flow table can be copied to the datalogger memory.
- The system uses solar panel and gel battery as power source. It continues to work with solar energy for years without the need for an external power source. The system can also be used directly with mains power.
- In case of power failure in the system, it stores the data in the Data Logger memory. When the energy is restored, old data can be retrieved in a healthy way. In the event of a power failure in the Data Logger, no deviation in date and time occurs. The backup battery in the Data Logger allows the date and time to proceed normally. When the energy is restored, it continues to record from where it left off.
- It is an ideal system for all applications in level or level-related flow and volume measurement in water and wastewater treatment plants. The error rate is quite low compared to other systems.

Data Logger MEL-200

Type	Floating
Memory	16 GB (16384 MB) Ring Memory
Operation Temp.	-40°C ... +80°C
Accuracy	±1 mm
Resolution	1 mm
Monthly Time Deviation	±1 min/month Automatic leap year calculation
Data Recording Interval	Data Recording Interval can be chosen as (1', 5', 10', 15', 30', 60' and multiples)
LCD Display	128x64 Graphic Dot Matrix / with back light
Keypad	4 Button Keypad (Battery, Instant Level, Instant Date, Flow and Setup information can be displayed on the screen at the same time.)
Level Changing Detection	Detect and record minimum 25.6 cm/sec level changes
Magnetic Encoder Level Measuring Range	0 cm ... 9999.999 m.
Setup	Full installation and data collection can be done via GPRS modem (remote access) or it can be done by computer via USB or RS-232.
Interface Ports	RS-232, RS-485, USB 4...20 mA. Analog Output
Back up Battery	3.6 V. Lithium for RTC (Life time of battery 10 years)
Data Recording Systems	2 Type, Instantaneous and Minute Average. (No data loss even if battery fails)
Alarm Status	Flood and Low Level Alarm
Parameters of measurement changes	Level information can be changed optionally (mm., cm., meters, etc.) Also flow information can be changed optionally.(l / sec, m3 / sec, l / min, m3 / min etc.)
Water Level, Discharge and amount monitoring	Water level, Flow and Volume can be calculated, recorded and monitored on the screen by using level information and Level vs. Flow table.
Installation Width	Min. 10 cm. up to 100 cm. (Mounting Pipe Diameter)
Shaft Encoder Compatibility	The shaft encoder is compatible with the MEL-200 limnigraph.
Data Transfer Speed	115200 bps, USB: Automatic Boud Rate(ABR)
Box	Pressurized Aluminum(170x120x55) mm.
Accessories	Float, Counterweight and 20 m. beaded rope included

External Accessories	AKIM GPRS, RF Modem	**Weight**	~1,5 kg.
Power Supply	5,5...35 V. (External)	**Protection**	IP-67
Device Warranty	3 Years	**Service Warranty**	Lifetime

Magnetic Shaft Encoder

Sensor	10-Bit 360° Programmable Magnetic Rotary Shaft Encoder
Principle	Magnetic scanning 1 turn absolute, multiple turns summing
Source	N-S partially magnet
Accuracy	±1 mm
Resolution	0.1 mm (1 mm, 1 cm can be selected)
Measuring range	0 cm to ... 9999.999 m
Wheel Perimeter	256 mm = 25.6 cm per turn
Wheel Diameter	90 mm
Shaft Diameter	7 mm
Shaft - Load	Radial = 5 kg (50 N) Axial = 1 kg (10 N)
Data Entry Unit	Select "mm" "cm" or "m" from Setup
Magnetic Encoder Scanning	Denotes water level change.
Case	Pressure Cast Aluminum, Size: (170x120x55 mm)
Housing of Shaft Encoder	IP67 protection.(humidity and dust)
Working Temp.	- 30 °C ... + 80 °C
Storage Temp.	- 40 °C ... + 85 °C
Humidity	98 % relative
Weight	~1,5 kg.

Accessories

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

Server Communication System

Station Examples


Çatalan Dam Adana-TURKEY


Irrigation Channel (TS1) Tarsus-TURKEY


HPP Current Station-Artvin


HPP Water of Life Station-Trabzon

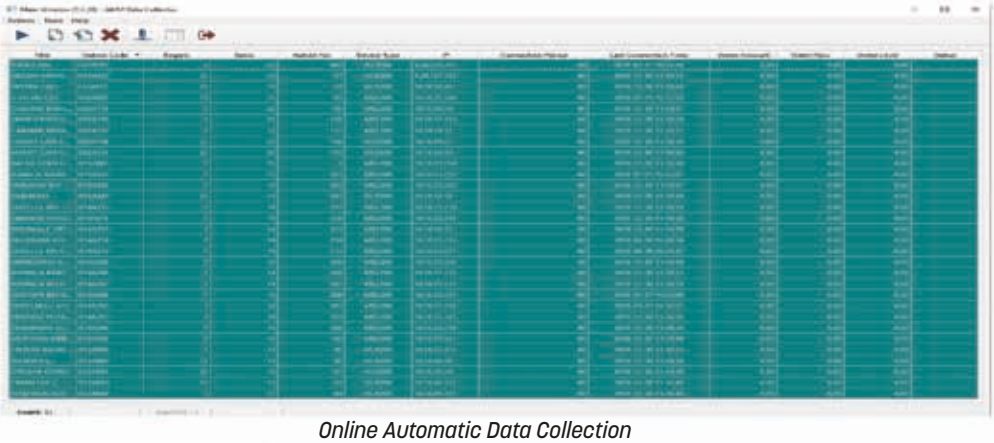

Çakıt River Pozantı- Adana-TURKEY


Irrigation Channel Samsun-TURKEY

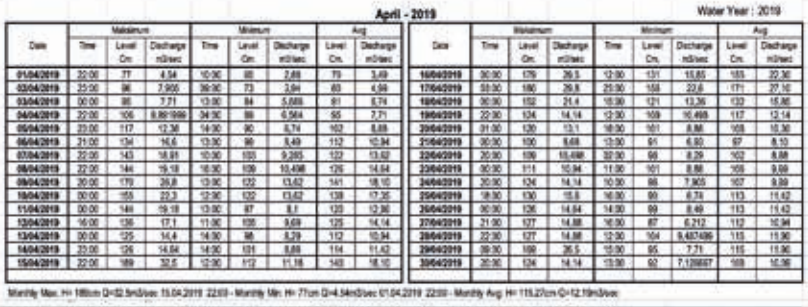
DATA ANALYSES PROGRAM

AKIM-MCD-500 - 1.2

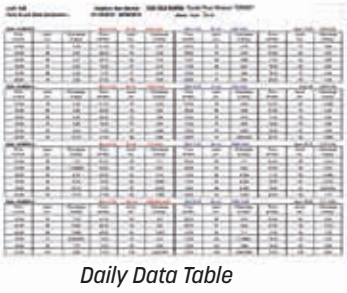
Program Main Window



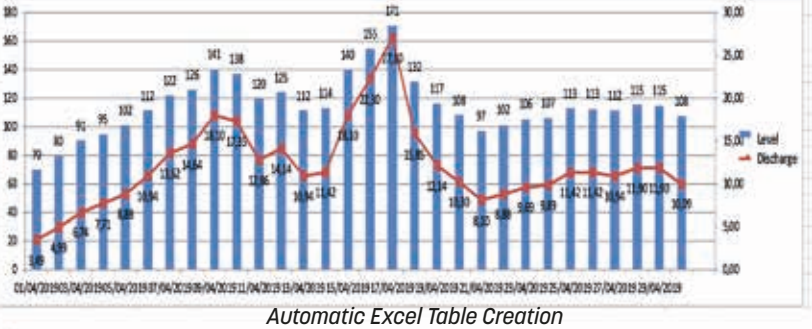
Online Automatic Data Collection



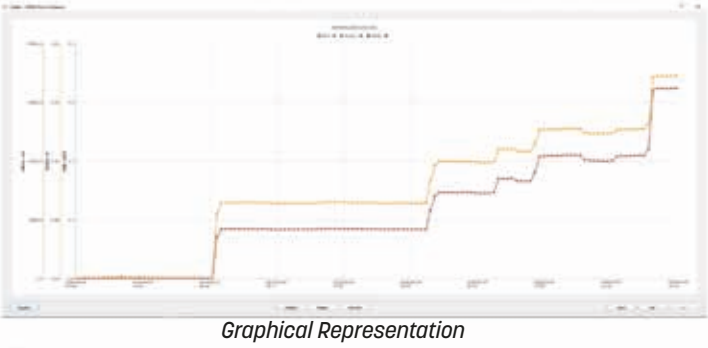
Daily Data Table



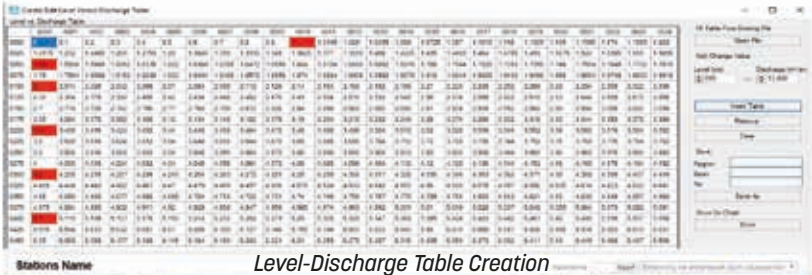
Yearly Data Table



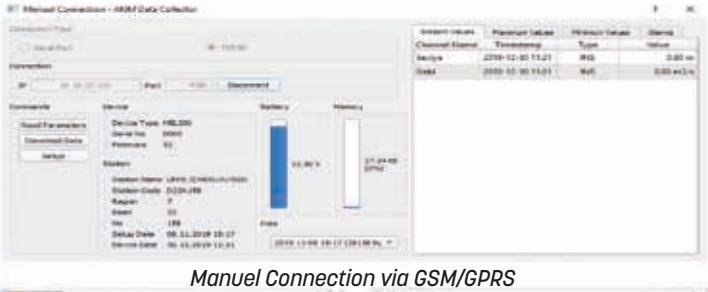
Automatic Excel Table Creation



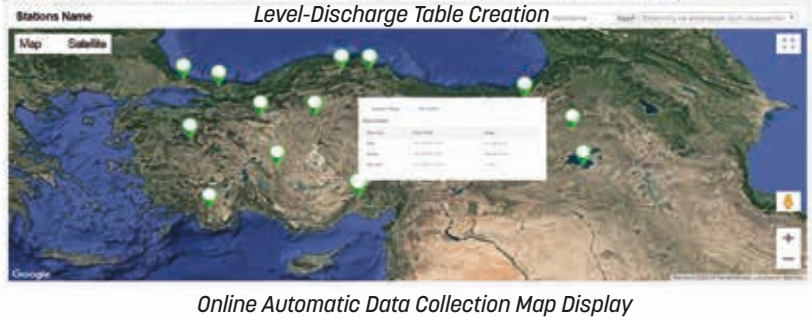
Graphical Representation



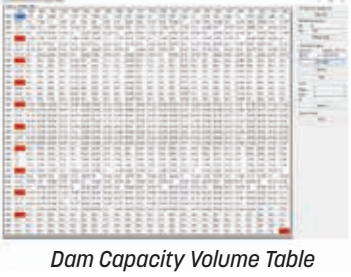
Level-Discharge Table Creation



Manuel Connection via GSM/GPRS



Online Automatic Data Collection Map Display



Dam Capacity Volume Table

Online GPRS Modem Setup

Please contact us for further information

OUR PRODUCTS:

- Data Loggers
- Water Level Recorders
- Water Level Indicators
- Water Meters
- Water Winch
- Water Quality Measurement
- Electronic Rain Gauges
- Remote Data Transmissions
- Current Meters
- Staff Gauges
- Evaporation Pans
- Auto. Meteorological Stations

Quality - Management
ISO 9001
Certificated Per ISO 9001

TÜV
DIN EN ISO 9001:2015
01 100 072276

CE

TSE-HYB
Certificate No
01-HYB-2516

Guaranteed
No: 01-044

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