



SMART SOLUTIONS

MARS

Smart GPRS Data Logger

Smart Solutions Product Catalog

MARS

Smart Mobile Data Logger

DESCRIPTION

Innovative and super simple to install and use, the new smart data logger named **MARS** is a high quality and advanced cellular low power data logger designed to monitor one or two flow meters and water meters from remote locations.

Equipped with BLE 4.0 for wireless configuration, and 2G/3G/NB-IoT modems for data transmission, this compact product is the perfect solution for water works monitoring.

Thanks to its low power consumption and the use of high capacity lithium batteries, a typical life time of 5 years in standard operation is obtained. The replacement of batteries and SIM card is simple and easily carried out by the user without additional tools.

Approvals

- CE
- IP 68

TECHNICAL DATA

- Power: Lithium set 3,7v 14AH
- IP Rating: IP68 (2 meters for 100 days)
- Operation temperature: -20°C to 75°C
- GSM Modem: U-blox. Available in 2G, 3G and NB-IoT
- Antenna: Dipole $\frac{1}{2} \lambda$ (external)
- Record memory size: > 90.000 records
- Real-time clock high accuracy +-2ppm auto sync via NTP
- Configuration and diagnosis: Bluetooth 4.0
- IO Cable length: 2M
- Dimensions: 85x78x180mm
- Pressure sensor: 1 (Optional)
- Pressure sensor range: 0-1, 0-10,0-20 bar
- Digital inputs:2
- Analog inputs: 2 (optional)

Markets

- Water networks
- Water distribution
- Remote monitoring

FEATURES

- In built pressure sensor
- Configuration and diagnosis by Bluetooth.
- Detachable high performance antenna.
- Remote firmware update.
- Easy configuration using Windows® configuration software, both locally and remotely.
- Typical autonomy of 5 years (registering 1 or 2 flows every 5 min and transmitting once a day).

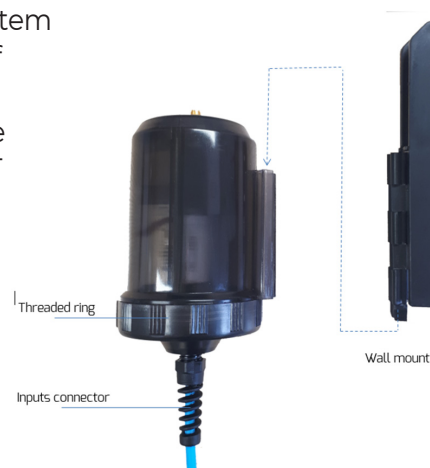
ADVANTAGES

- Simple & Quick- takes only 5 minutes to install
- Light- weight only 600g , ideal for air transportation
- Cost effective- bring great “value for money” comparing to similar product in the market.

ZEUS WEB - ZEUS Server

RAPHAEL SMART offers the ZEUS WEB service to monitor our stations from a web browser or from mobile applications, Android, and iOS.

Customers who prefer to have full control of their system without using the ZEUS WEB, can have the option of installing the ZEUS SERVER at their own premises , thus having all the advantages of ZEUS WEB and the possibility of integrating data from RAPHAEL SMART devices in external SCADAs through OPC UA.



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RAPHAEL, founded in 1949,
is the first Israeli manufacturer
of water control valves.

RAPHAEL's research department
constantly strives to introduce
new and innovative products
and solutions for water control
systems including water works,
fire protection and irrigation systems.



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