

Water Level Monitor with Weather Station

Remote data reporting to desktop or phone

IMP-WLM-100

The *IMP-WLM-100* is an integrated weather and water level sensor with seamless web-enabled data reporting. It delivers data to any web access portal and includes event triggers and fault alerts. It has integrated solar power with rechargeable batteries and a choice of telemetry to suit the location including RF, GSM or satellite.

The internal GPS (standard for GSM, optional for RF comms) simplifies location identification whether one or multiple units are installed. A compass option ensures correct solar panel alignment and reference for the wind direction sensor.

The user interface is simple: just place the sensors in position and it will start transmitting at the predetermined data rate to the web portal. Confirmation of operation may be obtained over the wireless link to a hand-held phone or rugged computer to ensure system operation before leaving the field site.



Details of the *IMP-WLM-100*

Keep a constant eye on water levels and weather with the *IMP-WLM-100*. The system combines the IP-66 rated *WLM-100* data controller, cabled depth sensor with temperature sensor and a Vaisala WXT-520 meteorological suite (or other compatible instruments) to provide real-time information straight to your desk.

High water level accuracy is achieved by direct reconciliation with atmospheric pressure.

IMP-pocket watch - Instant data direct to your pocket or palm



The IMP-pocket-watch is a subscription service that provides regular updates from any of your IMP-WLM-100 directly to your mobile smart-phone (iPhone or Android). Choose to receive the fully mirrored report or select pre-defined alerts.

Standard parameters include:

Air temperature
Relative humidity
Water level
Wind speed

Atmospheric pressure
Precipitation accumulation & duration
Water temperature
Wind direction

Other sensors are feasible – please enquire.

Typical applications include:

Boat wake detection
Flood levels
Harbour & Port tidal monitoring
River levels

Borehole water level
Groundwater
Lakes, Reservoirs, & sluices
Storm surges

IMP-WLM-100 features:

IP-66 rated enclosure resistant to salt water
Vaisala WXT-520 weather sensor suite
Cabled waterproof depth sensor with internal thermistor
Integrated 10 watt solar panel and charge control
Rechargeable lithium ion batteries
Lightning protection throughout
RS-232 serial data ports for sensors and 2 spares
Wireless user interface
Configuration and on-line graphical data display software included.
Sampling and reporting set to 10minutes. Other rates programmable
Programmable alerts for sensor failure/ level limits/ storm surge & wake trigger
GPS for location and theft tracking
Optional telemetry – RF, GSM, Iridium satellite, Ethernet
Optional Compass

IMP-WLM-100 specification:

Water level:	10, 20, or 50m ratings $\pm 0.1\%$ fsd accuracy (cable lengths 15, 25 or 60m)
Water temperature:	-5° to $+40^{\circ}\text{C}$ $\pm 0.05^{\circ}\text{C}$
Atmospheric pressure:	600 to 1100 hPa ± 0.5 hPa
Wind Speed	0 – 60 m/s ± 0.3 m/s or $\pm 3\%$ (0 – 35m/s) , $\pm 5\%$ (35 – 60 m/s)
Wind Direction	0 – 360 $\pm 3^{\circ}$
Rainfall	Cumulative, resolution 0.01mm $\pm 5\%$
Relative Humidity	0 – 100% RH $\pm 3\%$ over 0 – 90% RH
Air Temperature	-52° to $+60^{\circ}\text{C}$ $\pm 0.3^{\circ}\text{C}$ at 20°C

Other services:

IMP-pocket watch – webhosting with smart-phone alerts and data delivery