INNOVEC CONTROLS PTY LTD

ILS Level System

The **ILS Level System is a liquid level measuring system** which is mounted on a storage tank and powered from 12-40VDC or 85 to 265VAC. It incorporates a six (6) digit 18mm LCD (liquid crystal) display with white LED backlight.

The instrument can measure and store the storage tank's liquid level using a non-contact sensor. The incorporation of a Broadband modem module enables the ILS to send, store and display the sensor data using state of the art online API integration.

FEATURES

- Low cost - High performance
- Non-contact method of liquid level detection using an ultrasonic sensor
- Supplied in a surface mounting IP66 rated polycarbonate enclosure
- A configured Mobile Broadband Modem is incorporated in the instrument.
- High contrast white LED backlit LCD display of with 6 characters of 18 mm
- Mobile Broadband Modem enables ILS level data displayed on an internet dashboard
- Display in percent or CM
- Programmable low liquid level alarm for remote user notification by email
- Programmable high liquid level alarm for remote user notification by email
- Optional bund alarm input with remote user notification by email
- Optional two-wire temperature transmitter input for liquid contents measurement
- Standard one client email notification. Multiple client emails optional
- Sensor supply that can be adjusted from 8 to 20VDC
- 85 to 265VAC 47-63 Hz supply or factory fitted 12 to 40VDC supply
- Plug in screw terminal electrical connections

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TECHNICAL SPECIFICATIONS

Input Details

- The ILS uses an ultrasonic sensor to determine the liquid level in a non-contact method and results in an accuracy of 1cm and a range of 400cm

Display

- The ILS incorporates a six (6) digit 18mm high segmented LCD display with white LED backlight with a wide viewing angle and a viewing distance of 5 metres.

Low Liquid Level alarm

- If the liquid level drops below the configured Low Level (LL%), the ILS sends up to 5 E-Mail to the nominated user and updates one field in the spreadsheet database.
- Optional 1 Low - Low Alarm

High Liquid Level alarm

- If the liquid level jumps above the configured high Level (HL%), the ILS sends up to 5 E-Mail to the nominated user and updates one field in the spreadsheet database.
- Optional 2 High - High Alarm

Bund alarm

- This is a digital input. If the Bund alarm is triggered the ILS sends an E-Mail to the user and updates one specific data stream in the spreadsheet database. Option 3.

Temperature Input

- This is a 4-20mA from a head mounted 2 wire transmitter and PT100 sensor. It updates one specific data stream in the spreadsheet database. Option 4

Communication

- A Mobile Broadband Modem is used to connect the ILS to the internet. This feature allows the ILS to upload sensor data to an online database.

Environmental Parameters

- -10 to 70 degrees Celsius and 0-90% RH non-condensing.
- Front facia is weatherproof to IP66.

Connection Details

Terminal 1: Not used	Terminal 5: 0VDC internal
Terminal 2: 4-20 mA minus	Terminal 6: Ground Supply
Terminal 3: 4-20 mA plus	Terminal 7: 85 to 240VAC or 12-40VDC active supply
Terminal 4: Bund alarm input	Terminal 8: VAC Neutral or 0VDC common supply

Power Supply

- 85 to 265VAC 47-63 Hz or DC from 12 to 40VDC. An adjustable transducer supply of 8 to 24VDC at 30mA is incorporated in the instrument.

Mounting Details

- Surface mounting IP66 polycarbonate enclosure of case dimensions 150 mm long x 150 mm high by 100 mm deep with fixing centres of 132 mm wide by 132 mm high.

ILS Operation

- The ILS senses the liquid level in a tank as shown in Fig.1 and transmit the value every fifteen minutes to an online database. This period can be customised.
- The online database in the form of a private spreadsheet that stores and displays the sensor data, has high and low alarms with email notification for up to 5 users.
- Historical data can be downloaded in the form of excel or PDF.

Ordering information

- Model/input/display/power supply/options.
- Sample number ILS/INC/0-99999.9/VAC/Options.

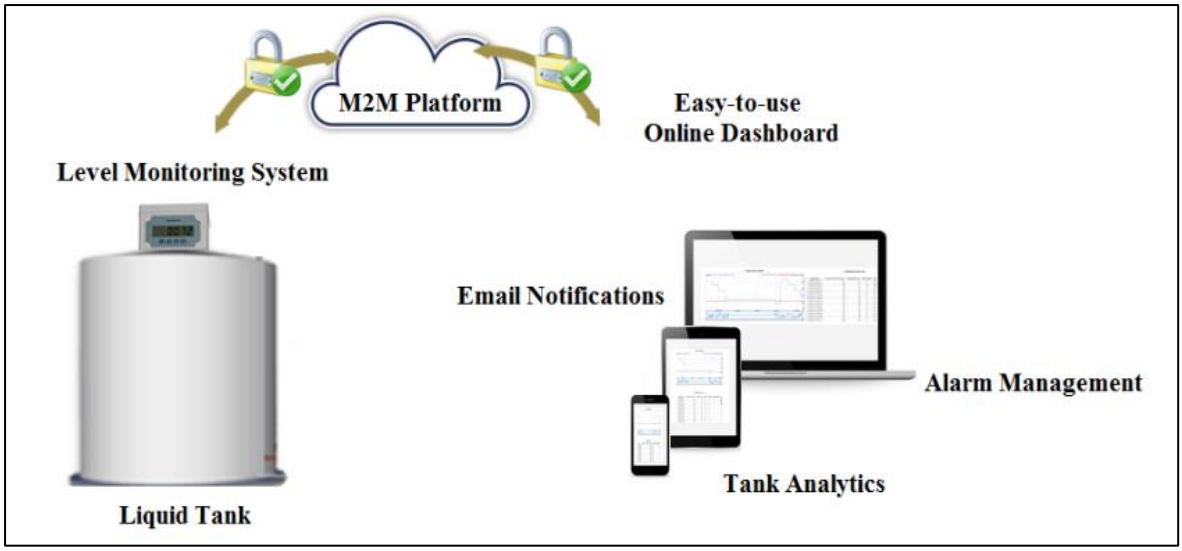


Fig.1. Working Principle

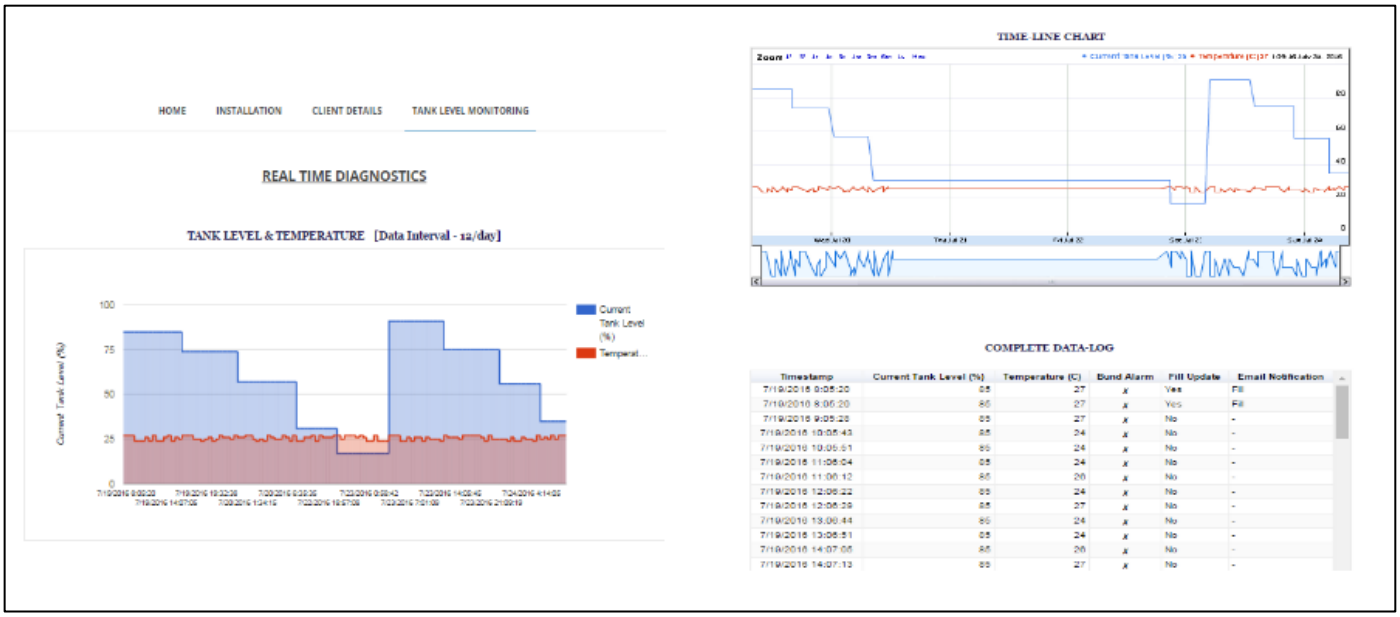
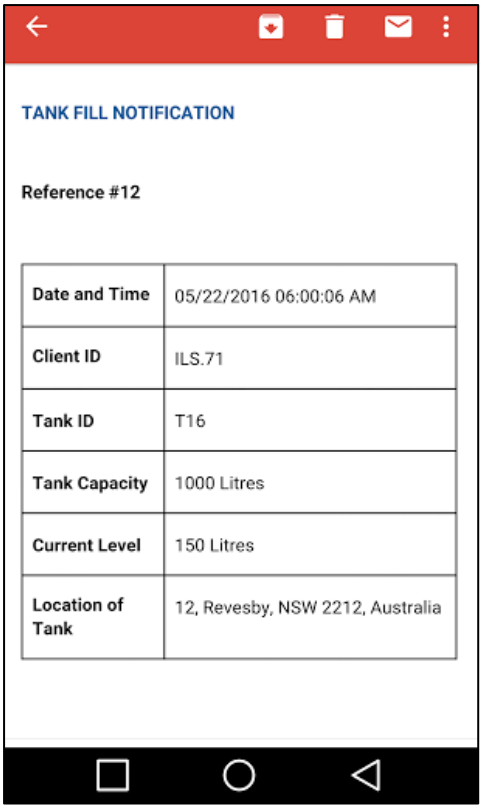


Fig.2. Private spreadsheet database dashboard



TANK FILL NOTIFICATION

Reference #12

Date and Time	05/22/2016 06:00:06 AM
Client ID	ILS.71
Tank ID	T16
Tank Capacity	1000 Litres
Current Level	150 Litres
Location of Tank	12, Revesby, NSW 2212, Australia

Fig.3. E-mail notification for low liquid level condition

Fig.4. Bund Alarm Float Switch.

Fig.5. Head Mounted Temperature Transmitter with PT100 Probe

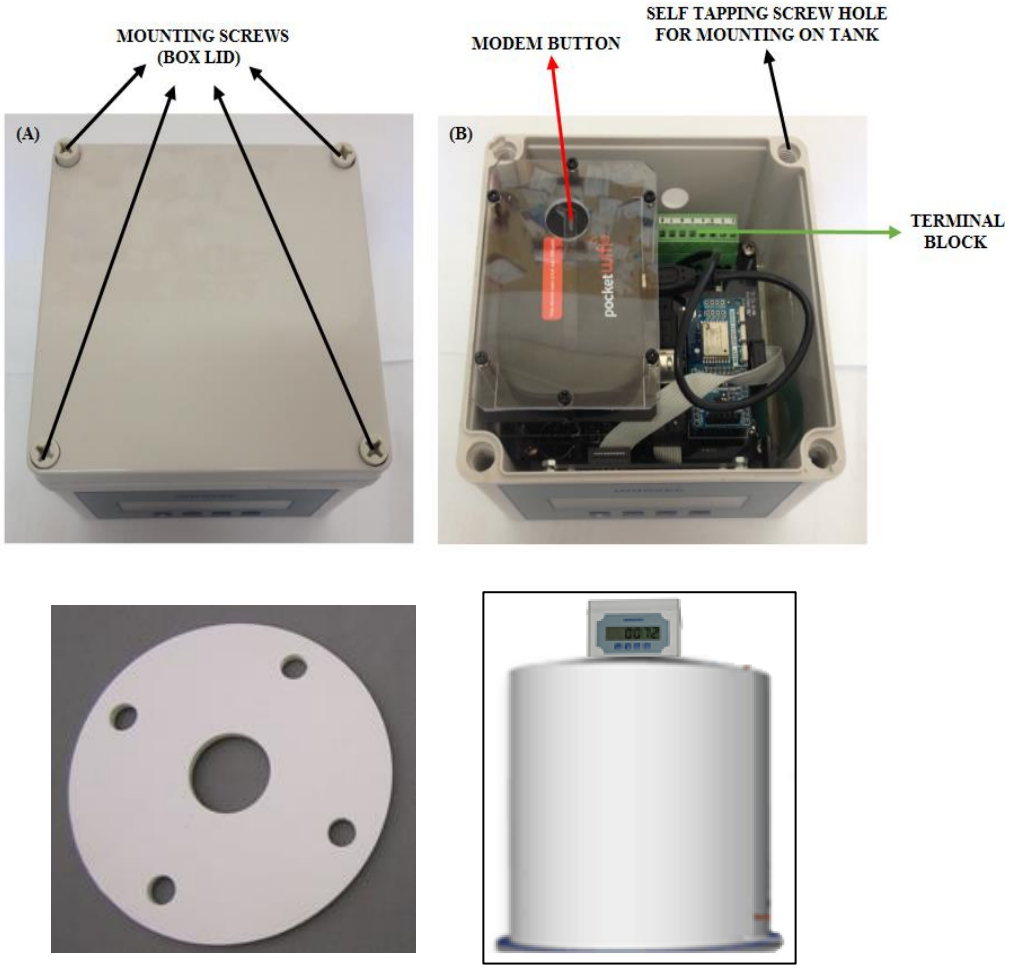


Fig.6. ILS Installation & Accessories