# INNOVEC CONTROLS PTY LTD

# **INNOVEC ITS Totalising System**





The ITS Totalising System is a vehicle based dispensing system which is powered from 12-40VDC or 85 to 265VAC that incorporates a six (6) digit 18mm LCD (liquid crystal) display with white LED backlight. The instrument can totalise flow, provide the excitation power supply for the flow sensor, output the total in real time by Bluetooth to a tablet and send an email for proof of delivery with liquid volume, time, date, GPS position and client signature.

#### **FEATURES**

- Simple touch switch programming with English statement prompts on the instrument or configure from the Innovec Totalisor App with voice prompts
- Quadrature input with reverse flow detection or single channel pulse train
- Low cost High performance
- High contrast white Led backlit LCD display of with 6 characters of 18 mm high
- Foreground, background total and rate display
- Dip switch selectable input: turbine, reed switch, open collector, Namur & CMOS logic
- Applications include chemical dispensing from a mobile tanker with proof of delivery by email with volume, time, date, GPS position of dispense and receiver signature captured on the tablet screen.
- Sensor supply that can be adjusted from 8 to 20VDC
- Plug in screw terminal electrical connections
- 85 to 265VAC 47-63 Hz supply or factory fitted 12 to 40VDC supply
- Bluetooth communication at 20 Metres or 300 Metres



ITS Totalisor is an 85 to 265VAC or 12-40VDC powered totalisor with batching capabilities for liquids that incorporates a six (6) digit 18mm LCD display.

# TECHNICAL SPECIFICATIONS

#### **Input Details**

• The instrument accepts quadrature input with reverse flow detection or single pulse train input from 0 to 2KHZ and is dip switch selectable for open collector, reed, Hall, Namur and turbine signals (from 20mV peak to peak).

#### **Display**

• The ITS 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.

## **Totaliser Memory**

• The instrument incorporates a foreground total, background total and rate display that is stored in EEPROM memory during loss of power. These values can be displayed by the front total touch button or viewed on the App

#### Low flow alarm

• The instrument incorporates a low flow alarm. If no input pulses are received in a user programmed period the low flow output is activated and LF ERR is displayed.

#### Communication

• Communication is by low energy Bluetooth at 2.5Ghz and is supplied as a line of sight distance of 20 metres or 300 metres

#### **Environmental Parameters**

- 0-70 degrees Celsius and 0-90% RH non-condensing.
- Front facia is weatherproof to IP65.

#### **Connection Details**

Terminal 1:Input Common (-)	Terminal 11:End of batch open collector output
Terminal 2:Input one minus	Terminal 12:Not used
Terminal 3:Input one plus	Terminal 13:Relay one normally open contact
Terminal 4: Input two minus	Terminal 14:Relay one common contact
Terminal 5: Input two plus	Terminal 15:Relay two normally open contact
Terminal 6: 8 - 24VDC sensor supply	Terminal 16 Relay two common contact
Terminal 7:Reset	Terminal 17: Ground Supply
Terminal 8: Not used	Terminal 18: 85 to 265VAC/24VDC active supply
Terminal 9:Open collector pulse output per litre	Terminal 19: VAC neutral or 0VDC supply (-)
Terminal 10:Low flow alarm OC output	Terminal 20: Not used

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

## **Mounting Details**

• Surface mounting IP65 polycarbonate enclosure of case dimensions 130 mm long x 80 mm high by 75 mm deep with fixing centres of 120 mm wide by 60 mm high.

#### **Totalisor Operation**

• The ITS Totaliser is user friendly to operate. The K factor, decimal points and set point are configured from the front panel. Pressing the start button will energise output relay one and start liquid flow. The display total will increment in value or display flow rate. When the set point is reached the relay is de-energised, stopping flow. A new screen is displayed on the tablet that allows an email to be sent for proof of delivery

# **Ordering information**

- Model/input/display/power supply/options.
- Sample number ITS/INC/0-99999.9/24VDC.

# 10,000 litres 14-04-2016 J. Citizen

Fig1. Proof of delivery – signature on Tablet screen example



Fig 2. Proof of delivery – Dispense Report on Tablet screen example