

Harvest Electronics

ITU G2 Nano - Manual

The Harvest ITU Nano Flow Meter Monitor is a standalone unit designed to meet council regulations for logging and telemetry of water meters.

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Features

- Two flow meter inputs
- Weatherproof plastic enclosure
- Stainless steel mounting brackets
- Solar powered with high-capacity battery
- Integrated Vodafone/Spark (2G/3G) modem
- Menu and display
- GPS

- Data viewable via secure website
- Data automatically sent to council (optional with customer permission)
- Automated alerts available (e.g. email or text alert for exceeding max flow rate)

Specifications

Solar Panel	1.5W 9V Monocrystalline Panel
Battery	Panasonic 6V 1.3Ah SLA (Sealed Lead-Acid)
Enclosure	Weatherproof UV-Stable ABS Plastic
Mounting	Stainless Steel Bracket and U-Bolts (optional)
Display	16-Character 2-Line LCD (back-lit)
Inputs	2x Digital (24V DC) 1x SDI-12 (5V only)
Cellular Modem	Telit 910-DG 850/900/1800/1900 MHz @ 2G 850/900/1700/1900/2100 MHz @ 3G
SIM card	Vodafone or Spark (provided by Harvest)
Antenna	Pacific Aerials Isolated Antenna
GPS	Not suitable for frequent updates e.g. vehicle tracking Designed for determining location of equipment e.g. portable pump - location can be sent with consent data optionally

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Overview of Operation

The ITU G2 Nano is designed for simple installation in the field and minimal maintenance.

Before Installation:

- Ensure there is adequate network coverage at the site. Harvest uses the Vodafone and Spark networks.
- In most cases a "Blue Tick" accredited electrician/pump specialist is required to connect water meters to our monitoring equipment when recording data for consent. If you are unsure, contact your local council.
- Refer to following page for mounting details.

Installation:

- Install the Nano (see installation instructions - also available on harvest.com/manuals.htm).
- Call Harvest Tech Support on 0800 HARVEST or 06 370 1991 to confirm the installation, provide the HSN (Harvest Serial Number - on a sticker inside the enclosure e.g. HSN20000), unique consent and water meter numbers, test that the unit is calling in, and set up your web login.

Post Installation:

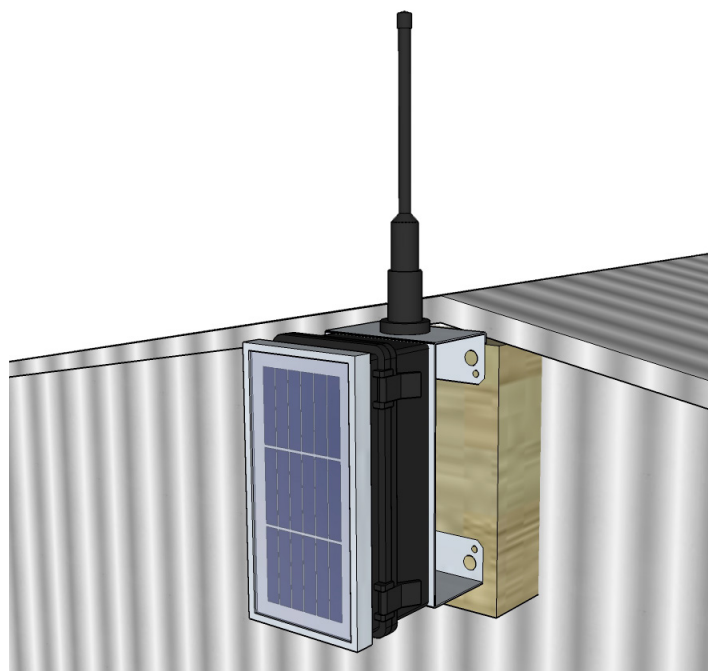
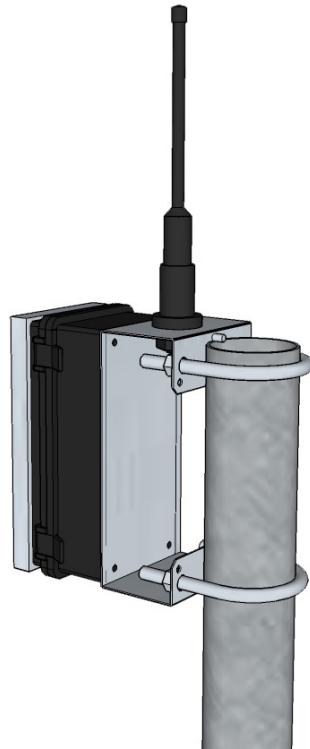
- At any point in time you can view your data on the internet by going to your HSN's page - e.g. if your HSN is 20000, your website is www.harvestalarms.com/20000.

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Mounting

There are multiple mounting options for the ITU G2 Nano. The mounting bracket (see below) is designed to either screw into a wall or attach to a 2 inch (50-60mm OD) galvanised pipe with the supplied U-bolts. The pipe can either be concreted in the ground or mounted to the side of a pump shed to lift the unit up above the roof.



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Menu Navigation

- Use "**Menu**" to activate the menu display or go back to the previous menu.
- Use the "**Up**" and "**Down**" buttons to navigate the current menu.
- Use "**Enter**" to enter the displayed menu.

Note that to preserve battery, the screen will time out if no button is pressed for 20 seconds (unless viewing the status of an input).

Menu Operations

Here are some common operations you can perform with the ITU G2 Nano's built-in display and menu.

Check Digital Input Status:

- Menu > Input data > Digital inputs
- Navigate up and down to see the status of Digital inputs 1 and 2 (shows meter pulses in both counts and frequency)

Check Battery Status:

- Menu > Input data > Analog inputs
- Navigate down to "Analog 9/Battery" to see the battery voltage

Check Cellular Signal Quality:

- Menu > Input data
- Navigate down to "Cellular signal" to see the cellular signal quality
- Note: 31 is the best possible signal strength, anything less than 8 is considered unreliable

Update Code:

- Insert SD card provided by Harvest
- Menu > Updates > Install code from SD card

Update Settings:

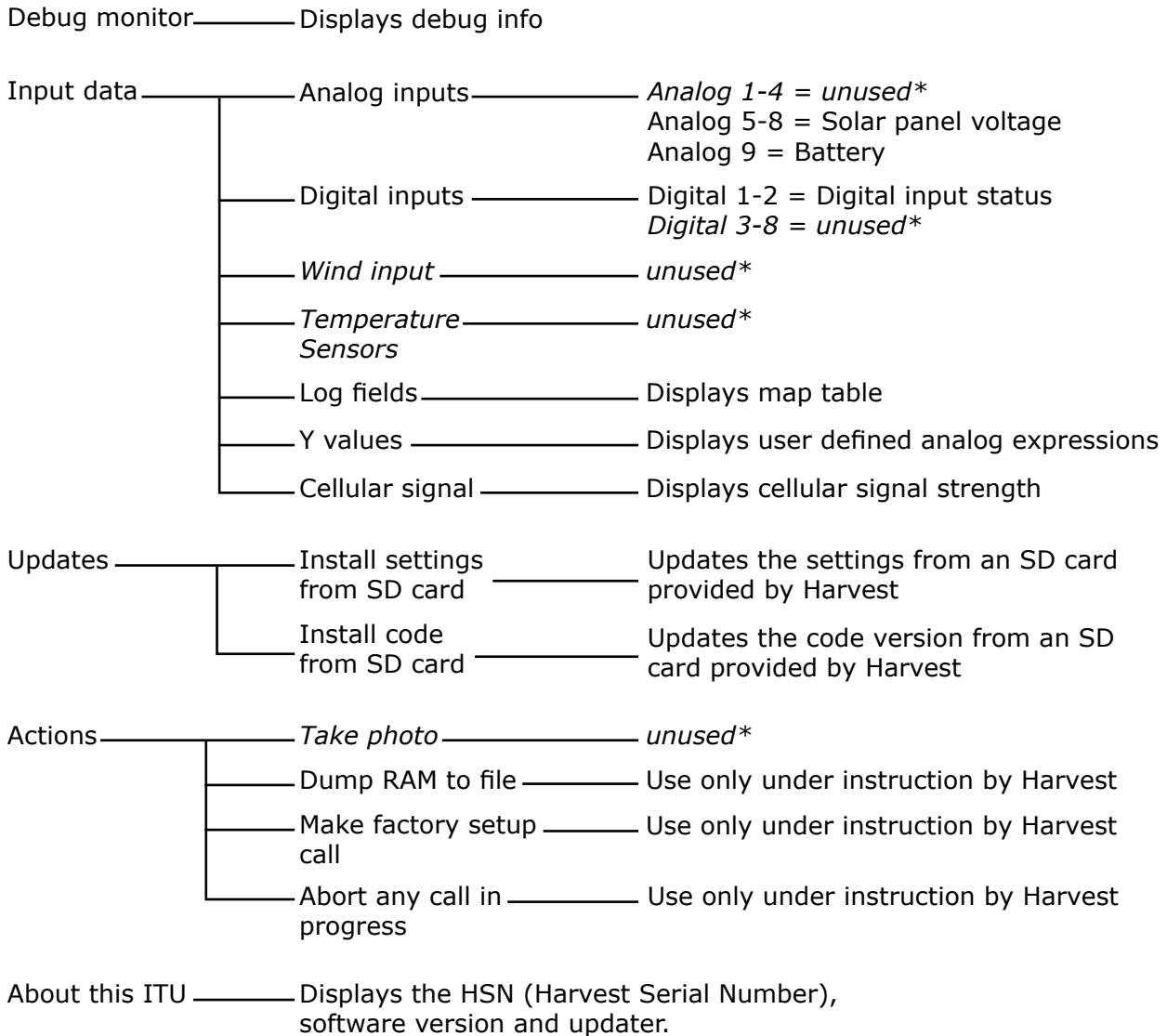
- Insert SD card provided by Harvest
- Menu > Updates > Install settings from SD card



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Menu Diagram



**The ITU G2 Nano uses the same code as the full ITU G2, resulting in the same menu. This means some menu items apply only to the ITU G2 and are therefore unused by the Nano.*