

Telstra IoT Quick Start Guide for the Professional Rain Gauge sensor

This guide will assist you to get your sensor installed and logger programmed and have data flowing to your data platform.

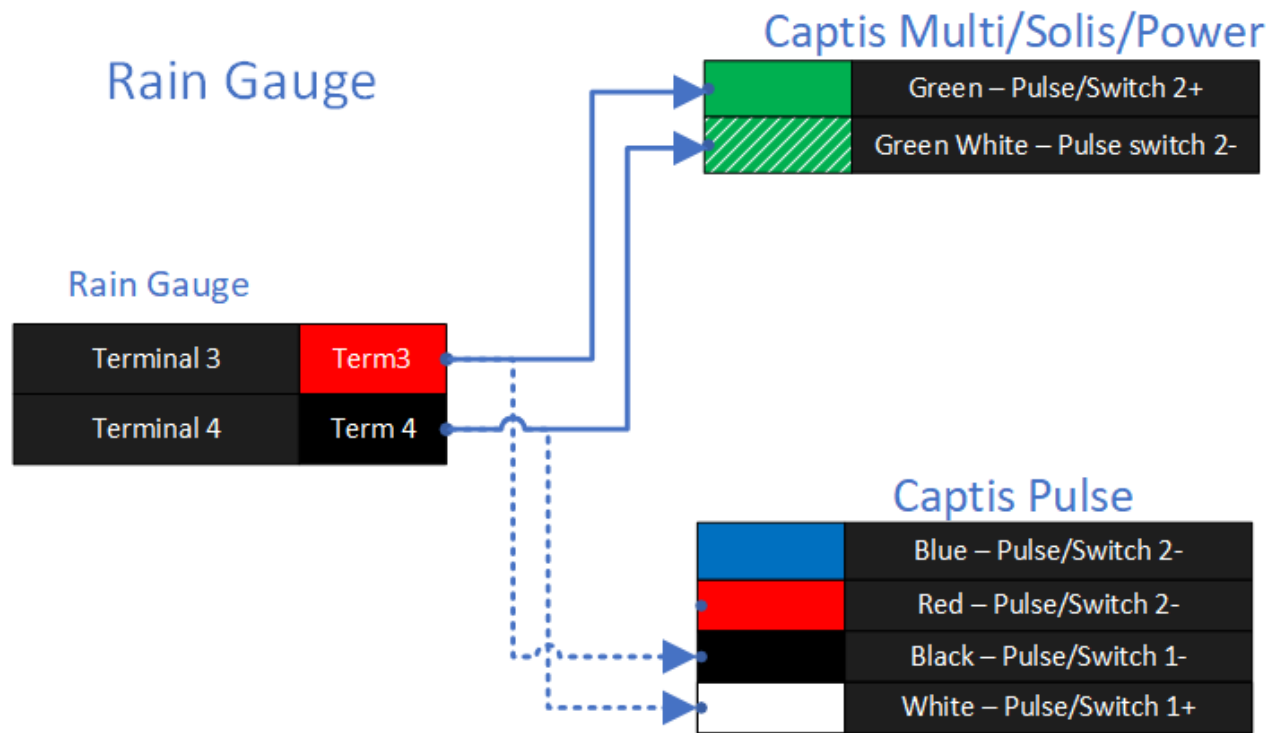
Thank you for the purchase of the Verge Solutions VRGH-01, a Professional Rain Gauge. This device has been tried and tested in the Captis environment by longtime users of this system, and we hope that you will enjoy it.

All precautions need to be observed around machinery and environments. All prevailing local laws and legal requirements need to be observed in the installation and operation of any system or devices from Verge Solutions. The systems must only be used as intended by Verge.

The VRGH-01, a Professional Rain Gauge sensor has a relay output with a measurement range of 0.2mm. This device is passive and will have minimal impact on battery life.



VRGH-01 measures the precipitation by means of a funnel (orifice 200 cm²), which leads the water down into the self-emptying tipping POM bucket, held in-place by a hard ferrite magnet. The magnet always exerts just enough tension to allow the measuring bucket to empty in one quick movement (less than 300 ms) and then return to its normal position, ready to collect precipitation once again. This means the counter weight always remains the same opposite to other conventional two spoons tipping bucket rain gauges. It's absolutely essential that this bucket remains completely clean and free of leaves and debris. Insects and webs can foul or cause bucket to become less repeatable. Make sure that the pressure does not exceed the pressure rating of 3 Bar.



To produce a solution, 3 parts are required:

- Obtain a Solar/Pulse and the Professional Rain Gauge.
- Have a platform to accumulate data with a Cumulocity tenant.
- Have connectivity to the Cumulocity data platform with a suitable antenna for the region (an external antenna Captis version may be required, check your cell coverage maps).

For the Captis Solar/Pulse to be correctly integrated into a solution, 2 criteria must be met:

- The Captis must be registered with your Cumulocity tenant.
- The Captis must have the appropriate input settings applied as well as logging frequency and transmission frequency.

Captis Modbus configuration in Cumulocity

Device

1. Device
 - a. Network Type - NBloT

Connectivity

1. Send Interval
 - a. Send Interval - D07 HH00 MM00 SS00
2. Time Of Day Send
 - a. Enable - On
 - b. Time Of Day - HH01 MM00

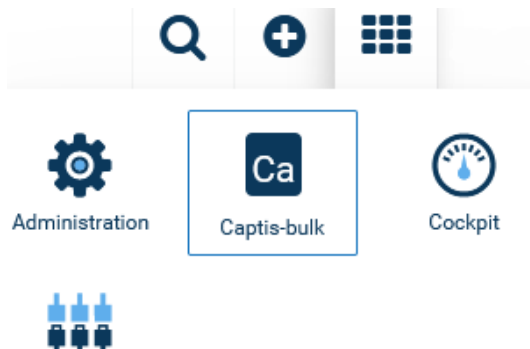
Logging

1. General
 - a. Log Interval - D01 HH00 MM00 SS00
 - b. Trigger Event - Both

How to register a device to your Telstra IoT Platform tenancy

1. Bootstrapping.

Firstly, mIoT (the manufacturer of the Captis) must bootstrap your device to be registered into your Telstra IoT Platform tenancy. If you have ordered your Captis through the Telstra Order Express portal this should have been done already.

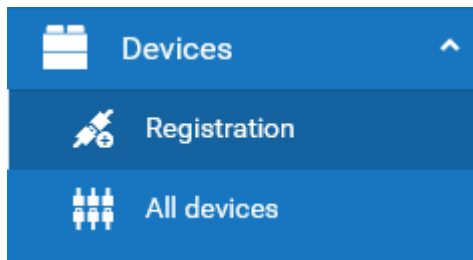


2. Access the Captis section.

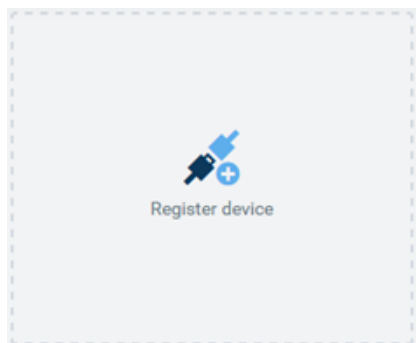
Log in to your Telstra IoT Platform tenancy. The login page will typically be at [yourcompanyname].iot.telstra.com. Once you log in, you need to find and click on the 9-rectangle symbol on the top right of the page, then click on the Captis symbol.

3. Access the registration page.

In the menu on the left, click the Devices dropdown and click Registration.



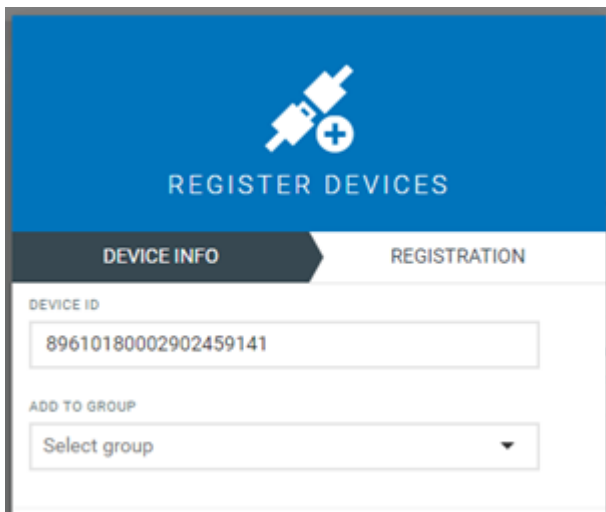
4. Click Register Device.



5. Creating the registration.

Click "General device registration" and then enter the Captis serial number in the "Device ID" field. The full Captis serial number can be found on the barcode sticker of the box it came in. If you wish to register another device or more at the same time, click "Add another device" and repeat.

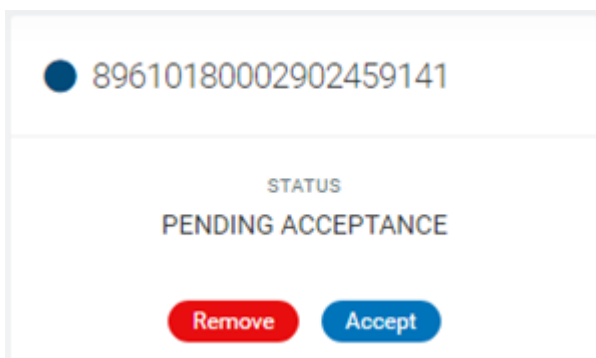
After you have clicked Next, a success message should appear. Click Complete. You should see a box corresponding to the Serial Number you have registered appear on the Registration page, with a status of "waiting for connection".



6. Accepting the registration.

Ensure if the device you are registering is an external-antenna variant, you have attached the external antenna. A Wake boot is done by holding the magnet supplied on the Wake Symbol between the Status and Cellular lights on the Captis for several seconds, until you see the Status light flash.

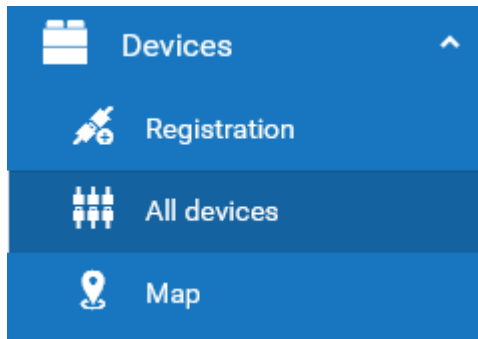
Once the Captis has connected, the "Waiting For Connection" box should change to say "Pending Acceptance" (see below). Click Accept. Status should change to Accepted. Then, wake boot the Captis device again.



Reload the page once the lights are off, and the box containing the device status should have disappeared.

7. Registration confirmation.

In the menu on the left of the screen, click the Devices dropdown and click All Devices. If the Captis unit has been registered successfully, you should be able to see the device with that serial number appear.



Congratulations! You have managed to successfully register your Captis device to your Telstra IoT Platform tenancy.