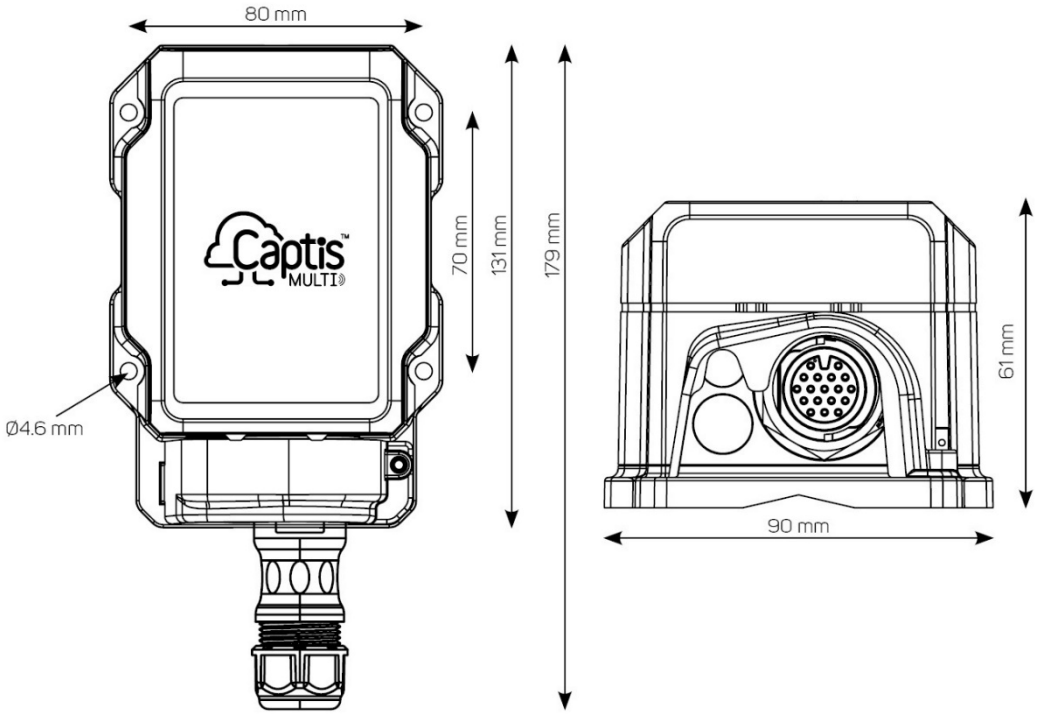
CAPTIS RECHARGE VERSION 1.2

INSTALLATION GUIDE

Contents

CAPTIS MULTI TECHNICAL INFORMATION

2x Pulse/Digital Input	Pulse and Switch Modes: -48v to 48v Passive Suitable for Reed SW + Open Collector + Dry Contact
Maximum Pulse Frequency	1000Hz
Sensor Minimum Open Resistance	1.25MΩ
Sensor Maximum Closed Resistance	60kΩ
Analogue Input (2)	0-10V / 4-20mA
Serial Input (1)	RS232/RS485, modbus RTU
1-Wire Channels (1)	Temperature/Humidity Sensors
Digital Output (1)	12V 1.0A, Solid State Relay
Sensor Power Output (2)	5VDC, 100mA / 12VDC, 40mA
Physical Dimensions	131 x 90 x 61 (LxWxD) w/ connector 179 x 90 x 61
Weight	< 500g
IP Rating	IP68



FRONT VIEW SIDE VIEW

BEFORE YOU BEGIN

Before starting this installation, you will need the following items:

- The contents of your Captis device box
- A small flat blade screwdriver and crimping tool
- An internet-connected device, such as a phone or tablet




What's in your Captis device box?

- Captis Multi
- Activation magnet
- Amphenol



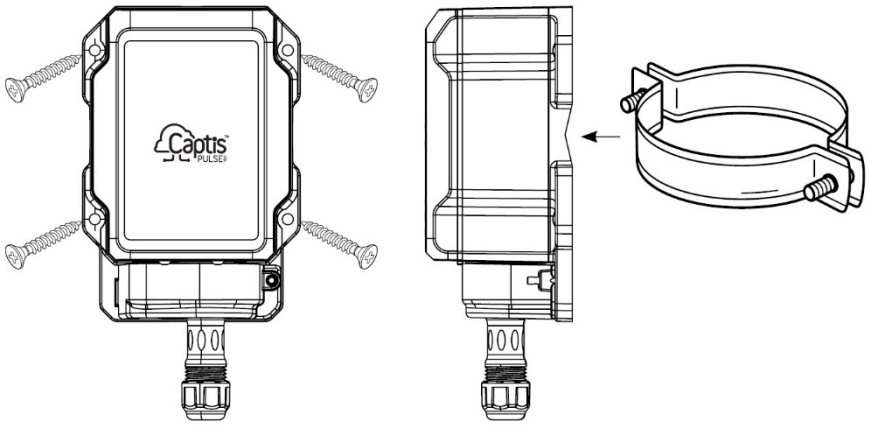
INSTALLATION

To successfully install the Captis you must perform the following steps:

1. Mount your Captis Multi
2. Terminate the sensor
3. Test the sensor
4. Test connectivity

Mount your Captis Multi

> Note: If the Captis Multi is to be installed underground or inside a metal cabinet, an external LTE antenna must be used. Ensure that your Captis device supports external antenna connection. The antenna lead must be routed to an open area where cell signal is less obstructed.



Your Captis Multi can be mounted in a range of positions using either:

- 4 screws via tabs for wall mounting
- 15mm max pipe clamp or cable ties via vertical and horizontal channels on bracket

When mounting your Captis Multi, ensure that there is enough length in the sensor cable to reach without any undue stress.

Terminate the Sensor

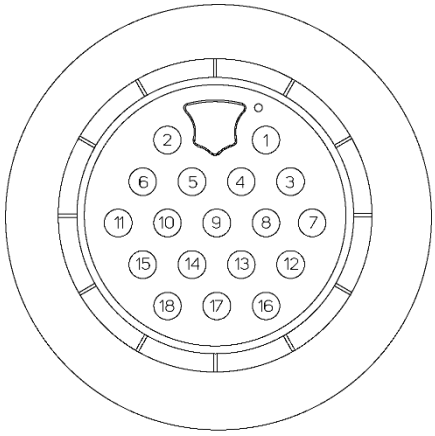
Your Captis Multi is provided with a four-pin Amphenol plug that can be connected to one or two sensors and/or measurement devices.

Use a crimping tool (not included) to ensure that the pins are securely fastened to the end of the sensor cable and insert into the appropriate receptacles of the Amphenol plug.

- A light tug on the cables will ensure that the pins are inserted and crimped correctly

Use the table below to determine how to wire the connections between the Captis Multi and the sensor via the provided Amphenol plug.

PIN	Description
1	Digital Input 2 +
2	Digital Output 1
3	Digital Input 2 -
4	5V Output
5	Ground 1
6	Digital Output 1
7	Digital Input 1 +
8	Digital Input 1 -
9	Ground 2
10	Analogue Ground
11	Reserved
12	One Wire
13	Modbus A
14	Ground 3
15	Analogue Input 4-20mA
16	12V Output
17	Modbus B
18	Analogue 0-10V



AMPHENOL FRONT VIEW

Best Practice Considerations

Use the appropriate O-ring (included) for the sensor cable diameter.

Do not remove pins from Amphenol plug without an appropriate removal tool (not included).

Ensure there is no debris between the plug and the Captis Multi prior to connecting.

Test the Sensor

When the sensor has been terminated into the provided Amphenol plug, it is recommended that the sensor itself is tested prior to connection with the Captis device. This can be achieved by:

- Connecting the sensor to the desired output
- Use a multimeter (not included) on the Amphenol plug to prove the sensor output

Once this step is complete, the plug may be fasted to the Captis Multi.

Test Connectivity

Use the magnet provided to 'Wake' the Captis Multi by holding it over the WAKE symbol.

The device should then connect to your platform.

Ensure that the device is tested in its final install location to prove that there is adequate signal strength.

If the device does not connect to your platform, please refer to the Troubleshooting section below.

TROUBLESHOOTING

SYMPTOM	MEANING	WHAT TO DO
 **STATUS** x20	Device is on/ awake.	Device is working as it should, leave device to collect data.
 **CELLULAR** solid	Device connected to LTE network.	Device is working as it should, leave device to collect data.
 **STATUS** no LED status	The device battery may be depleted, or a device fault may have occurred.	Use a different device and contact the supplier.
 **STATUS** x2 long + x1 short	No cellular registration (connection to the network) is being achieved.	Check network provider coverage map to ensure the site is covered by the LTE-M or NBIoT cellular network. If the area is covered, and the device cannot connect, contact the supplier.
 **STATUS** x2 long + x8 short	Device cellular module failed to boot.	Return the device to the supplier if the issue persists.
Sensor connection not working (not flashing the LED after LED flash turned on in Captis Configuration Toolset).	Connection wired incorrectly.	Confirm that the sensor is properly attached. Contact support if issue persists.
Sensor readings not uploading/appearing in cloud platform.	Sensor not triggering.	Ensure the sensor can be triggered by checking that the sensor is securely installed. Contact support if issue persists
	No cellular signal	Check Status and Cellular LED. If flashing, complete troubleshooting for a flashing Cellular LED. Contact support if issue persists.

MAINTENANCE & SAFETY

Note: Opening the Captis Multi device will void warranty and could cause significant damage to the device.

Maintenance

Your Captis Multi does not require any maintenance once installed. Your Captis Multi device uses a non-rechargeable Lithium ION battery, and there are no user serviceable parts inside the device.

If you encounter any issues with the device during its standard operation, contact your support team.

Electromagnetic Radiation – Human Exposure

Warning: This device has a Maximum Permissible Exposure (MPE) radius of 20cm.

It is the installer's and end customer's responsibility to ensure that no person has any body parts within 20cm of the device or antenna while device is transmitting. Device is transmitting when the 'Cellular' LED is lit.

Battery Handling & Disposal

This Captis devices uses a Lithium ION Battery.

The Captis device should not be tampered with, drilled directly into for mounting purposes, otherwise opened, or crushed. If necessary, the Captis device should only be disposed or destroyed of in a safe and environmentally compliant manner.

Visit the Australian Battery Recycling Initiative (ABRI): https://batteryrecycling.org.au/recycle-batteries/why/find-a-recycler/ for more information on lithium battery disposal in your state and across Australia.

Note: There are no user serviceable parts inside the Captis device.