



Installation Guide

Captis Pulse Lite



1 Before You Begin

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

- The contents of your Captis device box
- Flat blade screwdriver
- [ASST-C-05-W-A crimping tool](#)
- An internet-connected device, such as a phone or tablet



What's in your Captis device box?

- Captis Pulse Lite
- Mounting bracket
- Activation magnet
- Amphenol Connector + Pins + Glands



Handle With Care



Installation

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

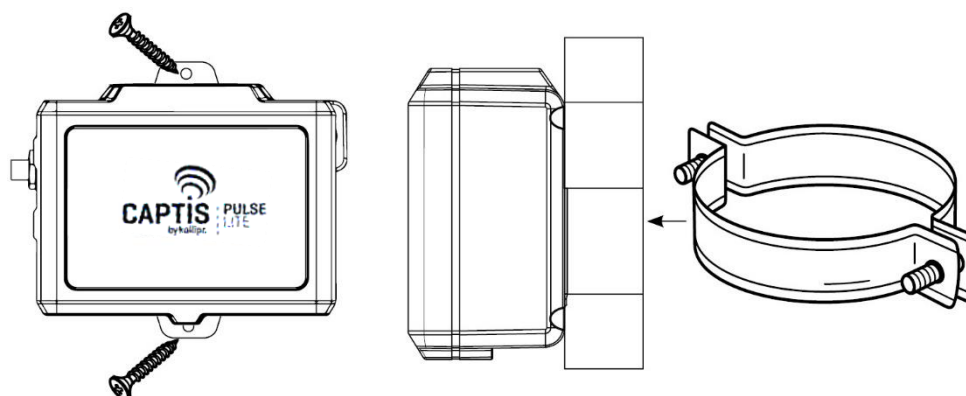
1. Mount the device
2. Terminate the sensor
3. Test the sensor
4. Test connectivity

1.1 Mount the Device

Note: If the Captis Pulse Lite 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.

The Captis device may be mounted in a range of positions using either:

- Screw mounting via the top and bottom tabs to a flat surface; or,
- Fastening to a pole/post with a hose clamp (<15mm thick) or cable ties



Upon successfully mounting the device, care must be taken to ensure that there is no undue stress on the cable between the sensor and the device. If the sensor cable does become strained in the final location, please remove the device, and relocate closer to the sensor.

1.2 Terminate the Sensor

Your Captis Pulse Lite is provided with a four-pin Amphenol plug that can be connected to one or two sensors and/or measurement devices. For additional information, refer to the Captis Termination guide.

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 identify the connections between the Captis Pulse Lite and the sensor via the provided Amphenol plug.



Pulse Lite		X-Lock Amphenol (Front View)											
	<table border="1"><thead><tr><th>PIN</th><th>Description</th></tr></thead><tbody><tr><td>1</td><td>Digital Input 1 -</td></tr><tr><td>2</td><td>Digital Input 1 +</td></tr><tr><td>3</td><td>Digital Input 2 +</td></tr><tr><td>4</td><td>Digital Input 2 -</td></tr></tbody></table>	PIN	Description	1	Digital Input 1 -	2	Digital Input 1 +	3	Digital Input 2 +	4	Digital Input 2 -		
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1	Digital Input 1 -												
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4	Digital Input 2 -												

Best Practice Considerations:

- Utilise the appropriate cable gland provided when terminating the sensor to preserve IP rating.
 - **Small: Red** – Cable OD 5.0 – 6.0mm.
 - **Medium: Yellow** – Cable OD 6.0 – 8.0mm.
 - **Large: Blue** – Cable OD 8.0 – 10.0mm.
- Do not remove pins from the Amphenol plug once terminated. Please contact Kallipr for further support
- Ensure there is no debris between the plug and the Captis Pulse Lite prior to connecting.


1.3 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:

1. Connecting the sensor to the desired output
2. Use a multimeter (not included) on the Amphenol plug to prove the sensor output. Note that some sensors may require power from the Captis and can only be tested once completely connected.

Once this step is complete, the plug may be fastened to the Captis Pulse Lite.

1.4 Test Connectivity

Use the magnet provided to 'wake' the Captis Pulse Lite by holding it over the  symbol. The status light should flash, followed by a solid cellular light.

The device should then connect to the platform and upload data.


Prove that the sensor output is accurately recorded and uploaded by the Captis Pulse Lite.

Ensure that the device is tested in its final install location to confirm signal strength is greater than -96dB RSRP (Reference Signal Received Power).

If the device does not connect to your platform, please refer to the Captis Device Troubleshooting guide.



1.6 Captis Device Troubleshooting Guide

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 + x8 short	No cellular registration (connection to the network) is being achieved.	<p>Check network provider coverage map to ensure the site is covered by the LTE-M or NBIoT cellular network.</p> <p>If the area is covered, and the device cannot connect, contact the supplier.</p>
 STATUS x2 long + x1 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.	<p>Confirm that the sensor is properly attached.</p> <p>Contact support if issue persists.</p>
Sensor readings not uploading/appearing in Captis Cloud.	Sensor not triggering.	<p>Ensure the sensor can be triggered by checking that the sensor is securely installed.</p> <p>Contact support if issue persists.</p>
	No cellular signal	<p>Check Status and Cellular LED.</p> <p>If flashing, complete troubleshooting for a flashing Cellular LED.</p> <p>Contact support if issue persists.</p>

For further support, please contact your Kallipr distributor.
 For any additional enquiries please contact the Kallipr Support Team at support@kallipr.com.