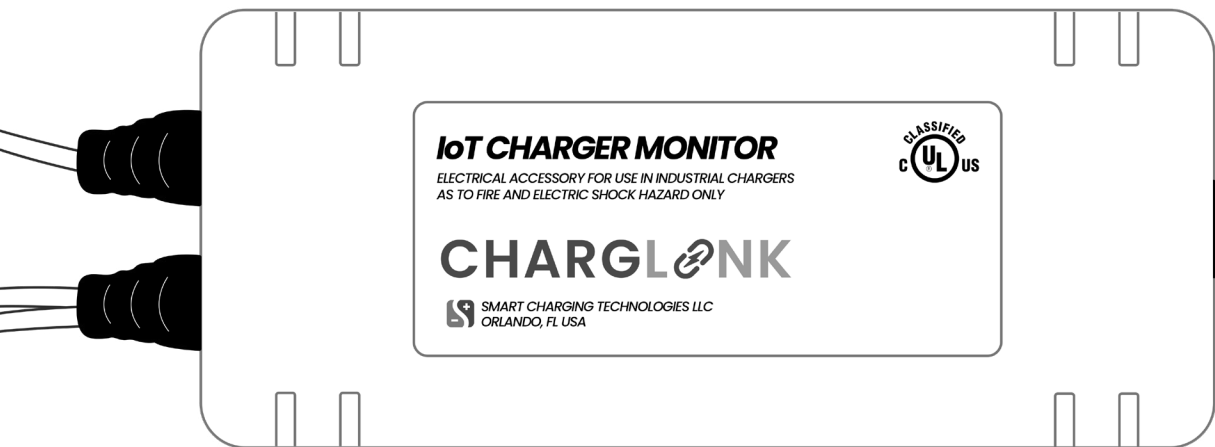


CHARGLINK

Quick Installation Guide



In the Box:

1x CHARGLink unit
8x Zip ties
1x Quick Installation Guide
Double Sided Tape

Additional Tools Maybe Required:

Phillips head screwdriver
Wire cutter
Clean Cloth

Important Safety Instructions

While every care has been taken to ensure the completeness and accuracy of this manual, Smart Charging Technologies LLC assumes no responsibility or liability for losses or damages resulting from the use of the information contained in this document. Due to technical improvements, some information contained in this manual may change without notice.

Before attempting to install and begin logging data with the CHARGlink unit, please read this manual



WARNING

1. **RISK OF ELECTRICAL SHOCK.** When working with batteries, extreme caution must be exercised. The installation should be performed by qualified personnel. Remove jewelry, wear protective clothing and eyewear (safety glasses), and exercise caution. Always follow the manufacturer's instructions for correctly installing batteries.
2. **RISK OF INJURY. DO NOT TOUCH THE SHARP NAIL PINS OF THE CLAMP-ON CONNECTORS.** The C-clamp connectors incorporate piercing type nail pins that have sharp tips. Be careful when handling and installing the clamp-on connectors to the Charger cables.



CAUTION

1. **RISK OF ELECTRIC SHOCK AND/OR ELECTRIC ENERGY – HIGH CURRENT LEVELS.** Do not touch uninsulated battery connectors or terminals. Be sure to discharge static electricity from tools and technicians by touching a grounded surface near the batteries but away from the cells and flame arrestors. All tools should be adequately insulated to avoid the possibility of shorting connections. Do not lay tools on top of the battery.
2. **RISK OF HIGH VOLTAGE AND CURRENT.** Do not quickly disconnect the charger from the battery. Sudden disconnection can cause dangerous voltage and current spikes that may be lethal. Always follow proper procedures to safely disconnect the charger and prevent unexpected high voltages or currents.

Technical Specifications

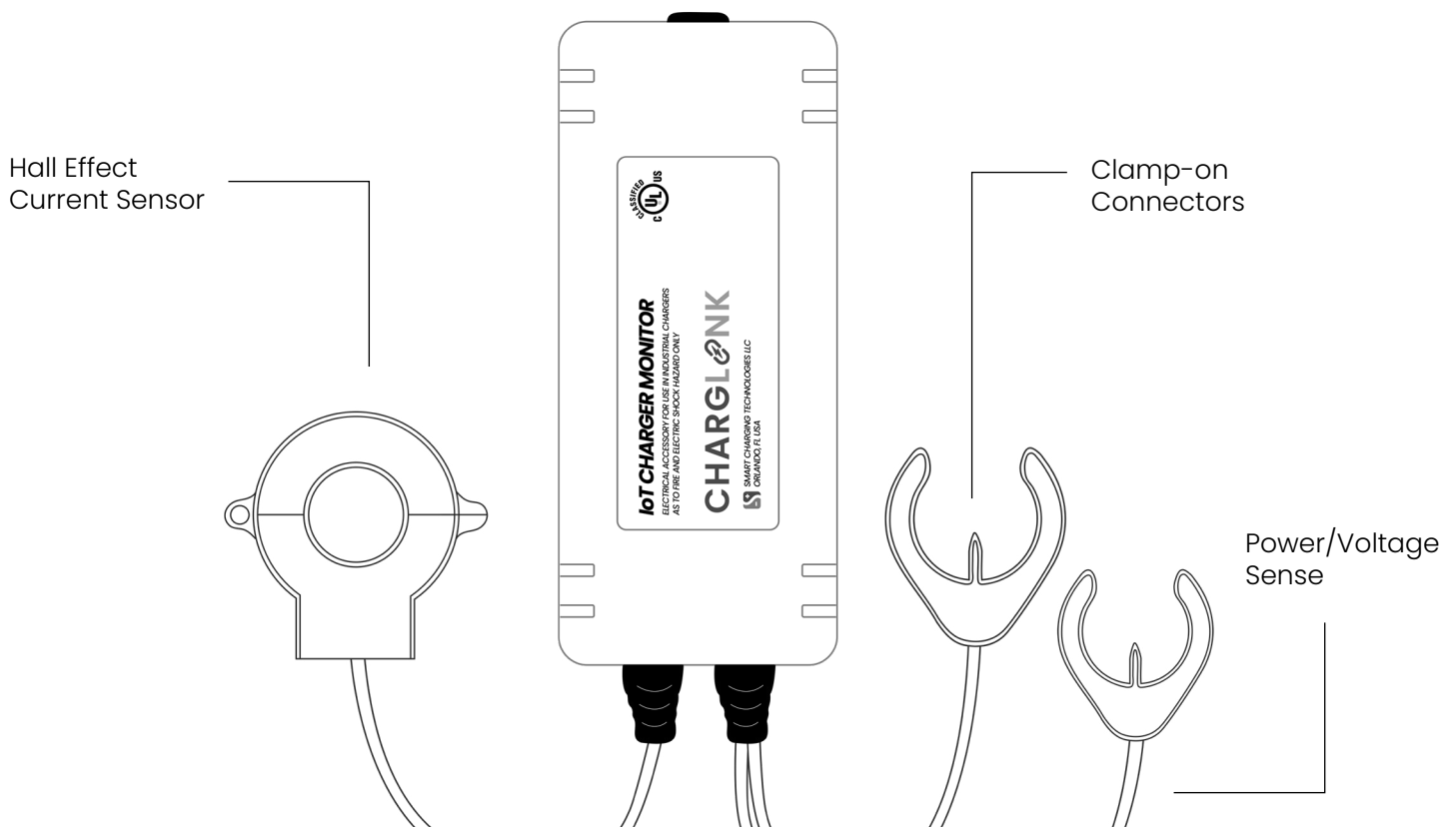
Nominal Truck/Battery Output Voltage	24V – 80V
Operating Voltage	12V – 110V
Maximum Charger Current	750A / $\pm$ 1A resolution
Operating Temperature	-25°C – 50°C
Communication Interface	Cellular or Wi-Fi
WiFi Range	100–300 ft
Protection	Reverse Polarity Protection
Mechanical	4.9" x 2.2" x 0.85"
Enclosure	Sealed, Splash Proof / UL 94V-5
Certification	UL/cUL

Calibration

The CHARGlink unit is calibrated at the factory and no further calibration is needed.

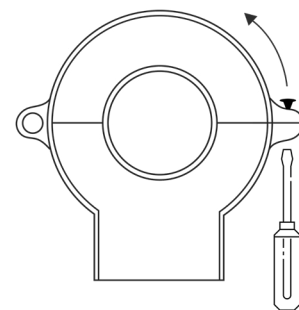
CHARGlink Unit Description

The CHARGlink unit has two cable clamp-on connectors and a Hall-effect current sensor. The clamp-on connectors have a pin that pierces through the DC cable's insulation and connects to the bare copper conductor.



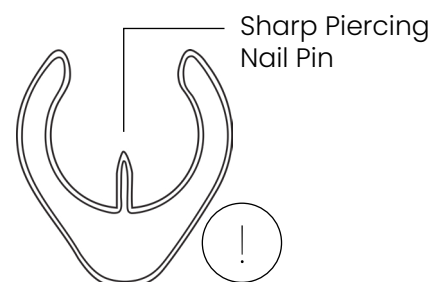
Hall Effect Sensor

The hall effect is a split core current sense device. The core halves can be opened by lessening the screw holding the halves and then tightening it once the hall effect is placed around the cable.



C-Clamp Connectors

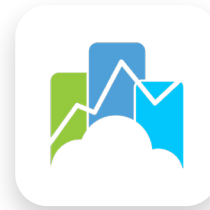
⚠ WARNING: The C-clamp connectors incorporate piercing type nail pins that have sharp tips. Be careful when handling and installing the clamp-on connectors to the forklift battery cables.



Download the Smart Telemetrics App

Before installing the CHARGlink hardware onto a truck, **download the Smart Telemetrics App and create an account to manage devices in the dashboard.**

The Smart Telemetrics App can be found and downloaded from the Apple App Store and the Google Play Store.



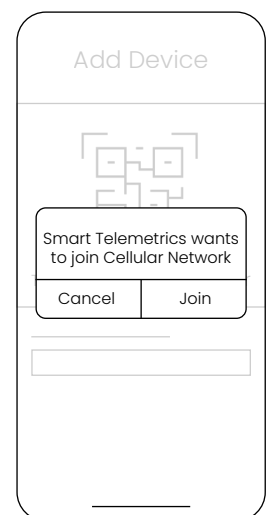
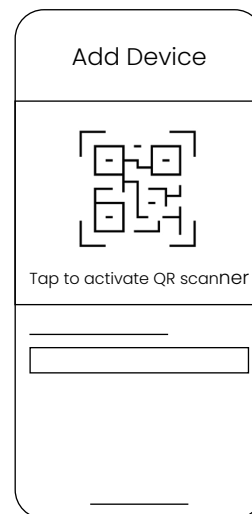
Connect CHARGlink with the App

After installing the app and creating an account, go to **Quick Setup** under the main menu, then follow the on-screen instructions to complete the setup process.

1. Scan Device QR Code

On the **Add Device** page, you can either scan the QR code on your device or manually enter its information into the app. For the quickest and simplest setup, we recommend using the QR code scan option.

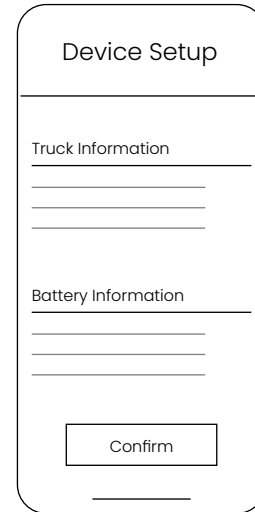
After scanning the QR code, a notification will appear asking permission for the app to join a Wi-Fi network. This network is the device's **Setup Cellular Network**, which is used to complete the setup process. Tap **Join** to connect to the device's setup network.



2. Device Setup

Once you've successfully joined the device's Setup Network, the app will prompt you to enter specific information about the forklift battery the unit is being installed on.

Providing this information is required to continue and complete the Quick Setup process.

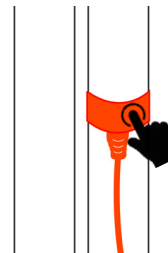
A screenshot of a mobile application interface titled "Device Setup". Below the title, there are two sections: "Truck Information" and "Battery Information". Each section contains three horizontal lines for text input. At the bottom of the screen, there is a rectangular button labeled "Confirm".

CHARGlink Hardware Installation

Please follow the listed steps below to properly install the CHARGlink unit.

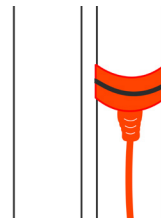
1. Positive Cable Installation

Connect the **RED** positive power/voltage sense lead to the **RED** positive forklift charger cable by gently opening the C-Clamp to fit around the cable and slowly pushing the nail pin of the C-clamp connector into the **RED** positive forklift charger cable.



Make sure to firmly press straight down into the charger power cable and not at an angle to avoid nail pin bending and breaking.

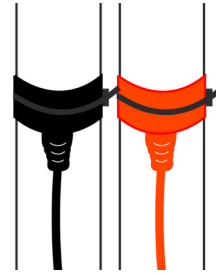
Ensure that the nail pin is fully inserted and the C-clamp connector fully surrounds the cable and secured with one of the enclosed PVC tie wraps. Use a wire cutter to remove any excess tie wrap.



Use a wire cutter to remove any excess tie wrap.

2. Negative Cable Installation

Using the same procedure as the **RED** positive power/voltage sense lead installation, connect the **BLACK** negative power/voltage sense lead to the **BLACK** negative forklift charger cable.

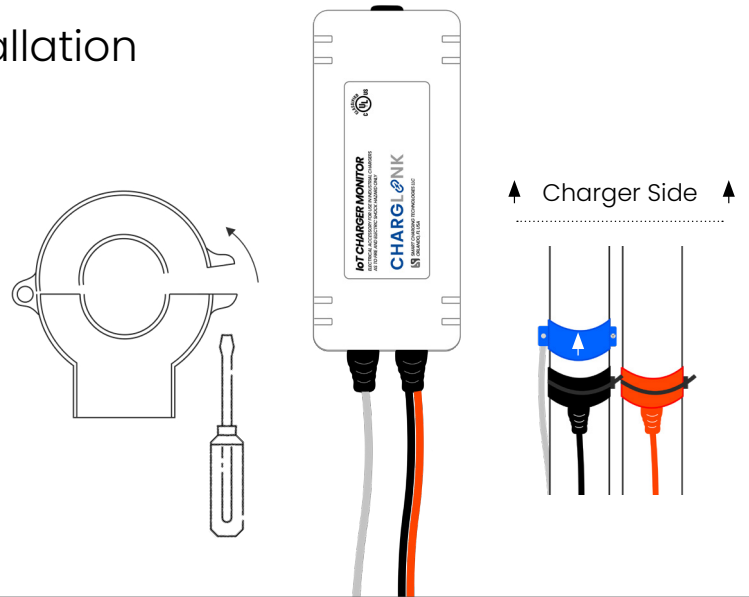


3. Hall-effect Current Sense Installation

Open the Hall Effect sensor and prepare to clamp it around the forklift's negative charger cable.

Install the Hall-effect on the **BLACK** negative forklift charger cable. **Arrow must point towards the charger.**

Close the Hall-effect and tighten the screw. Use a zip tie to secure the cables.



4. CHARGlink Mounting

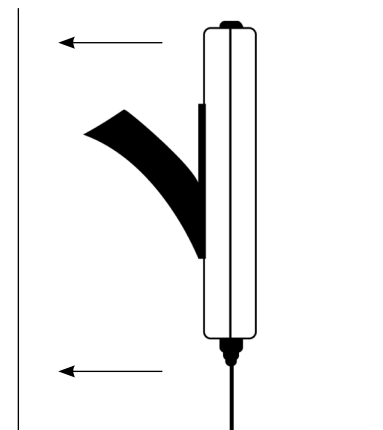
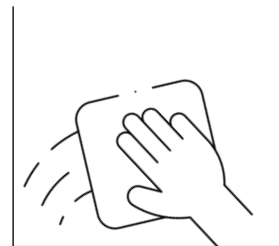
Identify a clean, flat area that is secure and close to the charger cables exit point. This should be a surface that's protected from direct impact, water spray, or excessive vibration.

Clean the surface thoroughly using a dry cloth or alcohol wipe to ensure proper adhesion.

Use the double-sided tape provided to mount the CHARGlink unit securely to this location.

Ensure the label is facing outward and visible for future inspection or replacement.

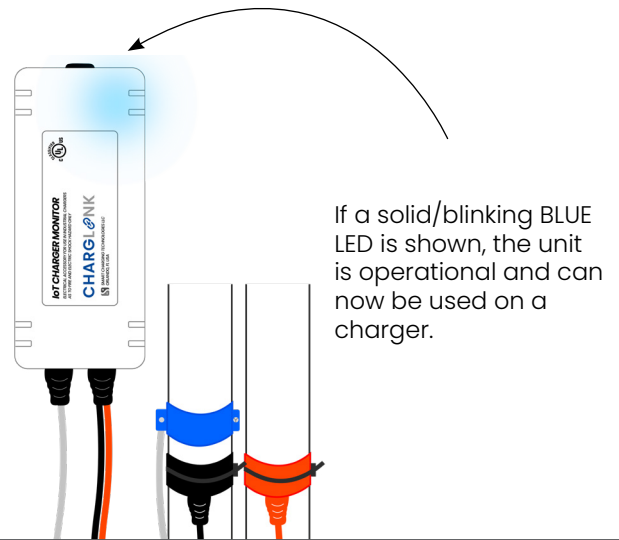
Once mounted, double-check that the cables are neatly routed and zip-tied to prevent movement or damage..



CHARGlink Unit Power & Connectivity Test

Once the CHARGlink unit is connected to the charger, connect a battery to the charger to verify CHARGlink proper operation.

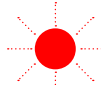
Ensure that the CHARGlink unit will show a Solid/Blinking **BLUE** LED indicating that the unit is communicating with the access point. If no **BLUE** LED is shown, verify that the access point is plugged in and powered.



If a solid/blinking BLUE LED is shown, the unit is operational and can now be used on a charger.

LEDs

Color

-  Solid Green - Unit operational but not connected yet.
-  Solid/Blinking Blue - Unit operational and connected to Cellular or WiFi router.
-  Flashing Red - Hardware fault detected.
-  No Light - No power, check cable connections or contact support.

Thank You for Choosing Smart Charging Technologies

If you have a question about your CHARGlink device, contact us by phone or through the Smart Charging Technologies website.

Contact Information

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Website: www.smartchargetech.com

Email: info@smartchargetech.com
