The HotDrop

Self-Powered, LoRaWAN connected electrical meter

Device Features

- ❑ Real-time energy use data acquisition
- ❑ Revenue grade 98.3% accuracy
- ❑ Clean installation – no wires or batteries
- ❑ Fast installation - less than 5 seconds
- ❑ Solar and battery inverter integrations
- ❑ Web and phone apps for visualization
- ❑ Mobile phone configuration
- ❑ Encrypted private network

The HotDrop is an advanced wireless current transformer (CT) with built-in data acquisition technology that needs no wires or batteries, and completely installs in less than 20 seconds. With its next-generation wireless radio, it can transmit over 10 kilometres line-of-sight, and through the most difficult of environments to provide accessible, real-time energy data. HotDrop's incredibly small form factor also allows it to fit in the tightest of spaces, and its real-time reporting ensures accurate installations.

The HotDrop is built for scale and includes encrypted communication for enhanced privacy and security, remote configuration for adapting and updating to different environments, cell phone pairing for rapid on-boarding, and 3-phase wireless teaming for industrial and utility-grade installations.

The HotDrop is available in multiple energy rating versions to solve the smallest to the largest challenges in energy monitoring.

https://Tether.co.nz

The CORE Technical Specifications

The Core is the brain and transmitter of any meter that it connects to. The Core can be swapped between various devices built to measure utilities such as electricity, water and gas.

The Core is Portable, Versatile, Durable, Secure and Reliable.

The Core Specifications	
PHYSICAL	
Size	15.90 x 30.80 x 35.0 mm
Weight	42.5g – 227g (Varies by model)
Power Supply	5 VDC 10mA Pogo interface or micro USB
COMMUNICATION	
Sampling Rate	Up to 6,000 samples per second
Data Reporting Rate	1/min (standard), 15-min (optional)
ISM Radio	LoRaWAN: 868 MHz - 928 MHz
Bluetooth	Bluetooth: BLE 5.0; 2.4 GHz
Security	Triple cipher AES rotating encryption
ENVIRONMENT	
Enclosure	Indoor rated. Outdoor weatherproof models available.
Operating Temperature	-40 to +85 degrees Celsius

The HotDrop & HotDropXL Technical Specifications

The HotDropXL

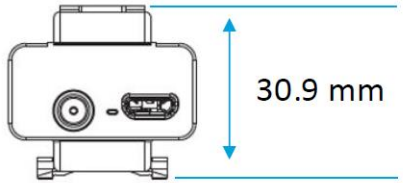
The HotDrop

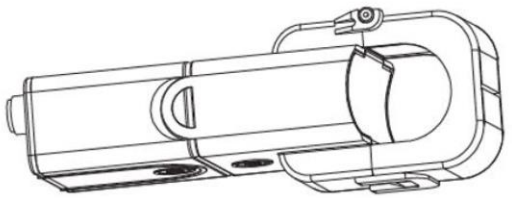
The HotDrop and HotDropXL are current transformers (CT) that attach the CORE. The CORE can seamlessly snap onto any HotDrop or HotDropXL in a matter of seconds. The size of the current flowing through the wire or bus bar you wish to monitor and measure will determine which HotDrop you select.

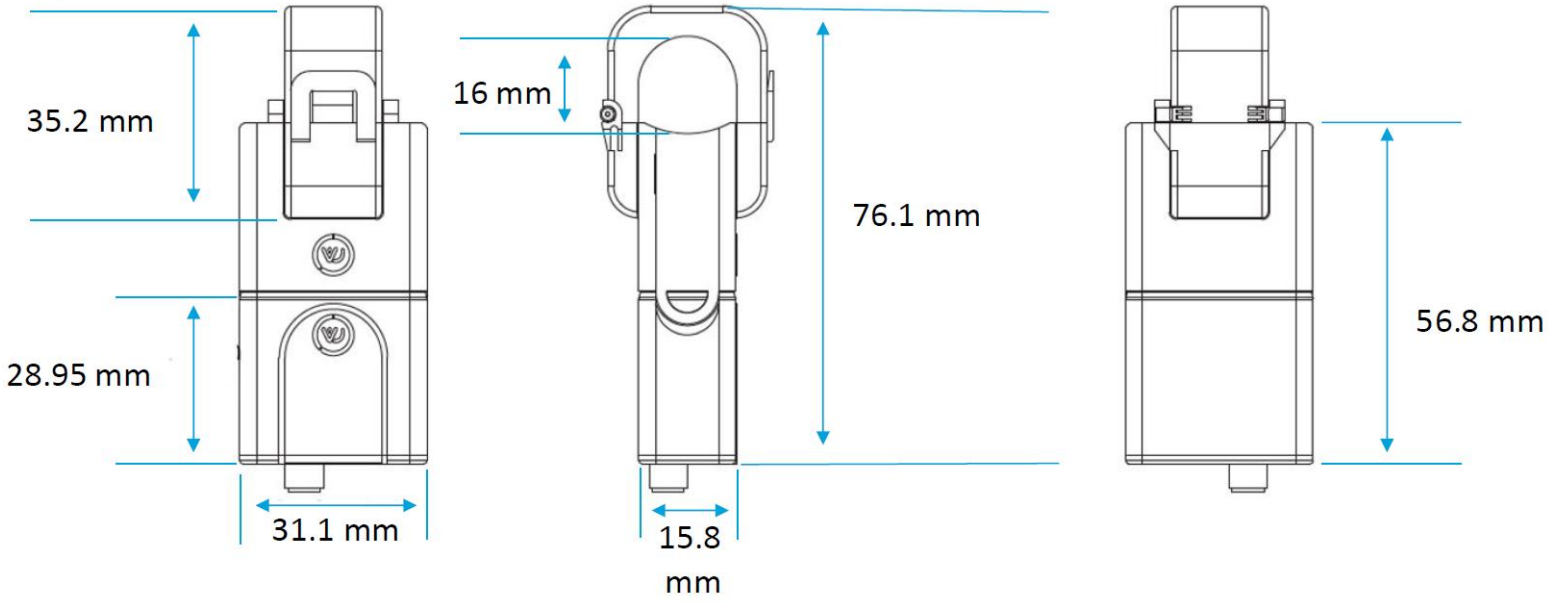
HotDrop Specifications	
PHYSICAL	
Meter	TheCORE
Service Types	Wires/Cables, Bus Bars
Ranges	Wires: Up to 300A, Bus Bars: Up to 5,000A
Accuracy	Wires and Bus Bars: 0.17%
Operating Temperature	-40 to +85 degrees Celsius
Sampling	Up to 6,000 samples per second
Power	Inductive (A minimum of 700mA is required for HotDrop transmission.)
Differentiators	No Wires, No Batteries, No Maintenance

The HotDrop & The CORE Dimensions

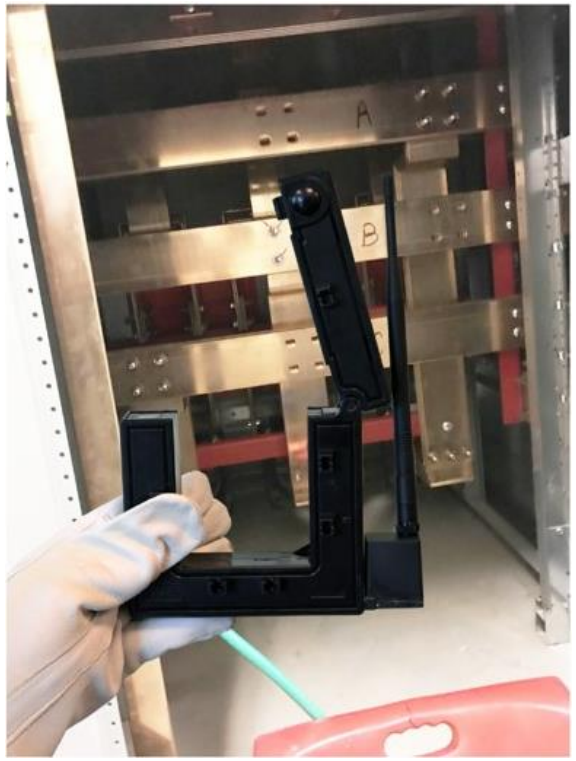
Dimensions of the HotDrop and CORE combined







The HotDropXL Dimensions



HotDrop XL Dimensions (mm)	
HotDrop	Window Size
Up to 400A	31.75 x 31.75
Up to 1000A	50.8 x 50.8
Up to 1500A	78.74 x 88.9
Up to 5000A	104.14 x 154.94

Step	Description
1	Download and Install the “Tether It” app which is used to setup buildings and install sensor. The “Tether It” app can be downloaded here: Available on the App Store Get it on Google play
2	Sign into the “Tether It” app using the credentials provided to you. If you do not have credentials then you can create and account or request a username and password from you HotDrop provider.
3	Once you have logged in, select the physical address that you would like to install the HotDrop in. If the physical address does not exist then you can setup a home by tapping on the “+” button on the top right hand side of the property screen.
4	Selecting the physical address will take you to the property detail screen. Once in the property detail screen tap on the “details” icon in the middle of the navigation bar at the bottom of the screen
5	Tap on “Circuits” on the right hand side of the navigation bar
6	Select “Add Hot Drop”
7	• Tap on the “+” button on the top right hand side to create a circuit if the circuit you wish to monitor does not exist • Name the new circuit (ie: Mains, Hot Water, Heat Pump, etc) • Tap “Add” to add the circuit
8	Select the circuit you want to install the HotDrop onto and tap on “Continue”
9	Scan the QR code on the side of the HotDrop. The App will tell you that the “Device is offline”, this is okay as the HotDrop needs to be clipped onto a live wire to charge itself up
10	Open and secure the CT onto the live wire of the circuit you want to monitor. After a few minutes you should see 4 Blinks. This means that the Hot Drop is charging up. On a circuit with 10 Amps flowing through the HotDrop should charge up within 4 minutes.
11	4 Blinks = HotDrop is charging. 5 Blinks = HotDrop is charged and attempting to connect to the network. 6 Blinks = HotDrop is charged and connected to the network
12	Installation is now complete. You can refresh the page by pulling down the screen.