

SAVING IS  
SIMPLE WITH  
WI-BEEE

Wi**→**beee 

SMART PLUGGING

[ENG]

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## **1. Introduction**

Wi-beee is a new method for electrical data acquisition, to ease your decision making when understanding the use of electrical energy. Based on the patented DINZERO system, our “clip-on” technology consists of easily clipping the device onto the wire or simply at the top of an MCB and, once powered-up, it will start converting the measured parameters into info, by sending them via wireless.

These units can be installed at any point of the installation and will help detect any hot-spot where the current is not being used efficiently and therefore very much help in drastically reducing energy consumption by remotely activating the alarms when the desired limits are passed.

All these energy demands are suitably registered in a data base. The right decisions can be taken with this application.

# Overview



Electrical Panel



Wi-beee





Laptop



PC



Smartphone

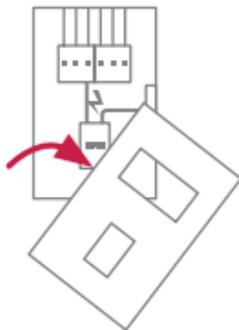


Tablet

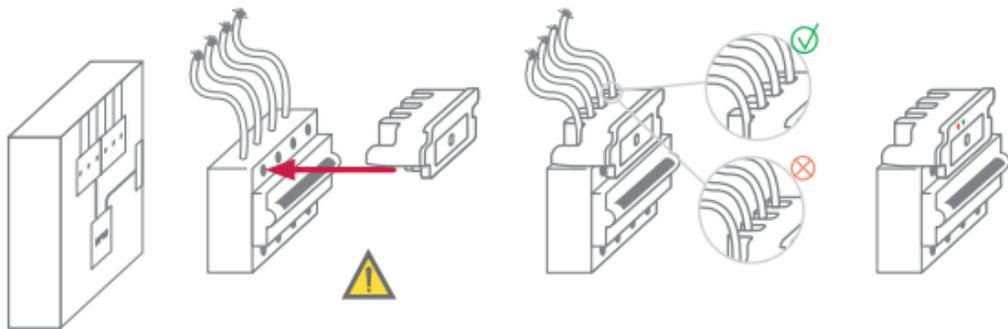


**Before using Wi-bee ensure that the conditions are the appropriate for working, and that the protection equipment is the adequate.**

1. Remove the protective panel.
2. Install the device, be careful with the neutral terminal (**N**) **this one must correspond with the neutral cable of your installation (your device could be damaged if a bad installation is made).**
3. Put the magnetics connectors in direction to circuit breaker.
4. Press the device to ensure the engage.
5. Put the conductor of each line close to the Wi-bee body.



6. Verify that the led red is on and blink.
7. After a few seconds, the led blue turns blinking.



## SYMBOLS



**Attention!**  
Refer to manual



**Double Isolation**



**Do not apply around or remove from hazardous live conductors.**

# 2

## App mode



1. Scan the QR code to download the app or get it from:

**<http://wibeee.circutor.com>**



2. Open the app  
Wibeee CIRCUTOR
3. Follow the steps indicated by the app.

## Direct share mode



1. On your smartphone/tablet, use the Wi-Fi connection settings to connect to Wibeee.
2. You can get access to the net configuration and instantaneous measures through your browser.

**<http://192.168.1.150>**

User: user

Password: user

# 3

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1. Now you have access to analysis your data trough

Wibeee CIRCUTOR.

2. Or you can get access to analysis your data, through the website:

**<http://wibeee.circutor.com>**

## 1. Safety Precautions



The **Wi-beee** has been designed and tested to fulfil the safety standard:

UNE-EN61010-2-030:2011;

UNE-EN 61326-1:2006;

EN 301 489-17 V2.2.1

Prior to use the **Wi-beee** for the first time, read the following carefully:

1. Circutor does not take responsibility for damage or physical injury that may be caused as a result of improper installation or use of equipment.
2. Use of the Wi-beee on uninsulated conductors is limited to 265 V~ to power frequency.
3. Do not expose the to aggressive or explosive environment.

4. Do not use the Wi-beee if there any reason to think that its no operating properly or that it is faulty.
5. For measuring in uninsulated conductor use the appropriate and necessary personal protection equipment.

## 2. External Connections



1. Direct connection to circuit breaker up to 65A.  
(85V ... 265 V~)
2. Requires Internet access through a wireless network
3. Requirements system administrator.  
You must open the following ports :
  - Port 8080 for Http Get/Post.
  - Port 53 for DNS.
  - Port 80 for Internet.

### 3. LEDs

Red LED

Blinking

Powered device

Blue LED, it indicates the connection status

Slow blinking (1s)

No link to a Wi-Fi network

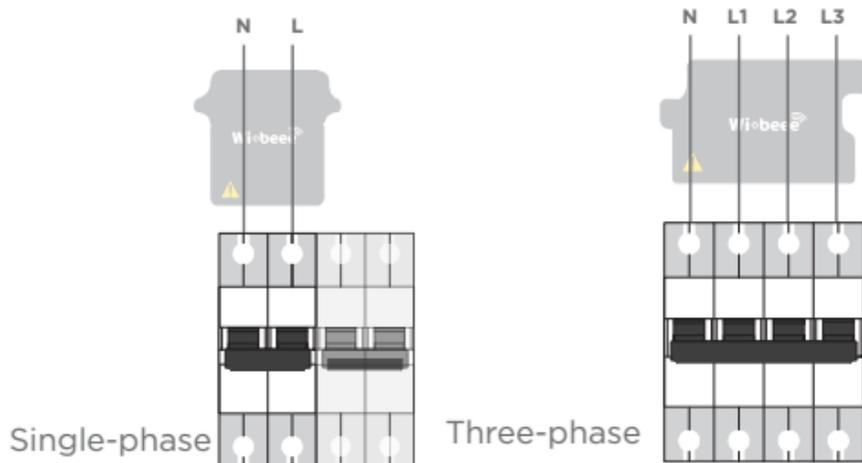
Fast blinking (<1s)

Link to a Wi-Fi network

Fixed on

Sending data over the network

### 4. Wi-bee Set-up on Breaker Installation



## 5. Technical Features<sup>(1)</sup>

### 5.1 Electrical Features

<b>Voltage Range</b>	85... 265V~
<b>Frequency Range</b>	50 Hz - 60 Hz
<b>Consumption of equipment</b>	1.5 VA ... 4.5 VA

### 5.2 Electrical Safety

<b>Isolation</b>	Double Isolation
<b>Protection Class</b>	II IEC/EN 61010-1:2010

### 5.3 Measurements range

<b>Nominal range current</b>	500mA ... 65 A
<b>Accuracy</b>	2 % + Variation in range of use (5.5)
<b>Nominal range voltage</b>	85... 265 V~
<b>Accuracy</b>	2 % + Variation in range of use (5.5)
<b>Power : Accuracy</b>	4% + Variation in range of use (5.5)

### 5.4 Communications

<b>Communications</b>	Transceptor Wi-Fi IEEE 802.11
<b>Frequency Range</b>	2.405-2.48 GHz
<b>Encryption</b>	AES128
Certification FCC (EE. UU.), IC (CANADÁ), ETSI (EUROPA)	

<sup>(1)</sup> The metrological specifications given are provided with adjustable field.

## 5.5 Variations in Range of Use

Quantity of influence	Range of influence	Typical	Máx.
Temperature	-10 °C ... +45 °C		0,3 %
Relative humidity	10 % 90 %		0,3 %
Crosstalk (current)		0,9 %	
External stray fiel (current)		1 %	
Conductor position		2 %	3 %
Adjust	Full Scale	0,2 %	0,4 %
Distance between wire and sensor		2,5%/0.1mm	

## 5.6 Standards

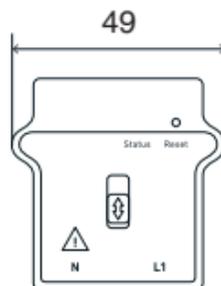
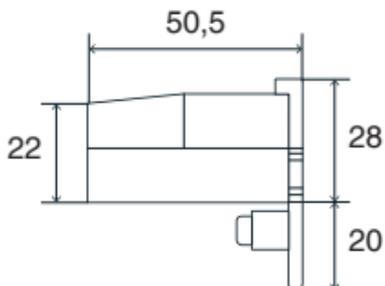
<b>Standards</b>	UNE-EN 61010-2-030:2011 UNE-EN 61326-1:2006 EN 301 489-17 V2.2.1
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## 5.7 Mechanical and Environment features

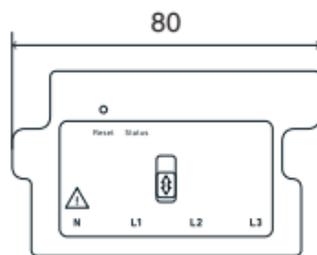
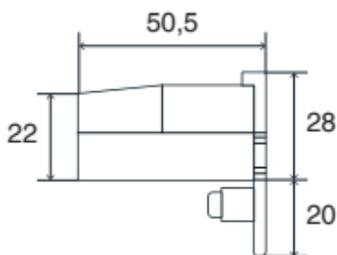
<b>Operating temperature</b>	-10 °C ... 45 °C
<b>Storage temperature</b>	-40 °C ... 85 °C
<b>Protection degree</b>	IP20
<b>Surround</b>	Self-extinguishable UNE 21031 90 °C
<b>Maximum altitude</b>	2000 m

## 5.8 Dimensions

### Single-phase



### Three-phase



**Wi-beee**

SMART PLUGGING



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Wi**↪**bee 

CALIBRATION

WIBEEE can be adjusted by the user after installation to achieve a higher measuring accuracy. To make this adjustment, access the WIBEEE web server as an ADMINISTRATOR.

Follow these steps to enter as an ADMINISTRATOR:

1. Connect to WIBEEE using your smartphone or a point-to-point terminal
2. Install WIBEEE as explained in the manual supplied with the unit
3. Open the smartphone's settings (WiFi settings) and search for the WIBEEE device (it will appear as WIBEEE XX:XX:XX), connect to this device
4. Open the browser and enter the IP  
<http://192.168.1.150>

5. Access the WEB with the following username and password:

User: admin

Password: Sm111cs?

WIBEEE calibration or setup:

Wibeee can be calibrated after installation for a higher measuring accuracy.



The following parameters can be set up:

1- Cable size: select the correct cable size to improve the current measuring accuracy.

2- Current measurement: use a measurement template as a reference (for example, a current clamp). Measure the current of each line with a measurement template and enter the current values measured using the template in the web calibration fields. This procedure minimises position and cable size errors, guaranteeing a more accurate measurement.

Voltage measurement: this procedure can also be carried out using a measurement template (voltmeter).

