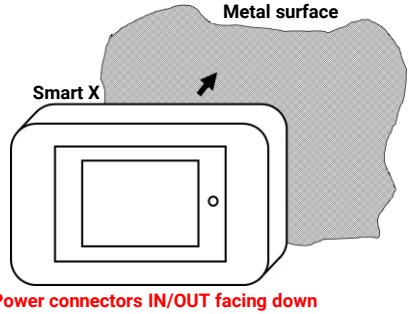
SETUP 1

The **Smart X** is a new generation meter compatible with all electrical configurations (CAT III 300 V) that enables to **identify the consumption of each type of equipment in a building** by measuring a single point of the network.

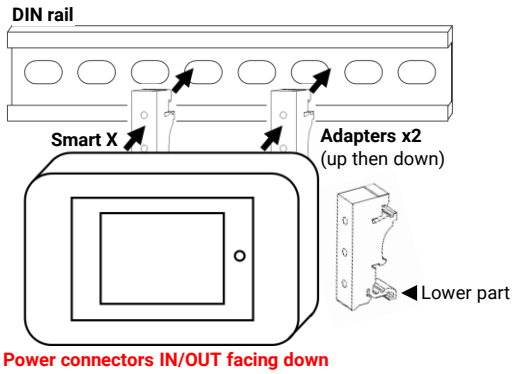
Magnetic, you can fix it on any metal surface *(fig. A)* or on a DIN rail thanks to the adapters provided *(fig. B)*.

Fig. A



or

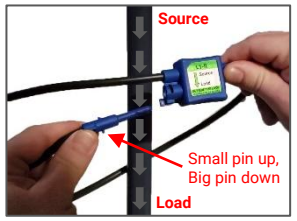
Fig. B

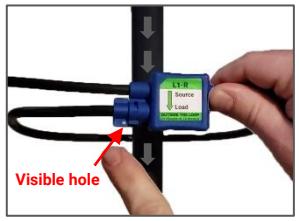




MEASUREMENT 2

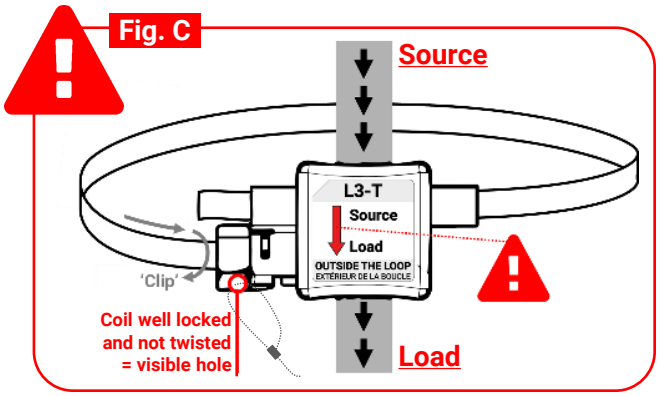
For each phase of the installation to be measured (eg: main incomer, specific circuit), **encircle all the insulated conductors* thanks to the openable coils** *(fig. C-D)*, **by imperatively respecting the direction of the sensors (colored arrow outside the loop, pointing from the source to the measured load) and the order of the phases**.



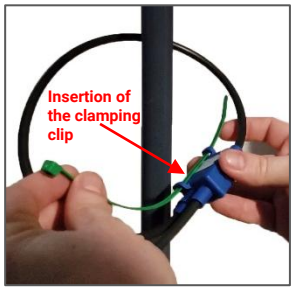


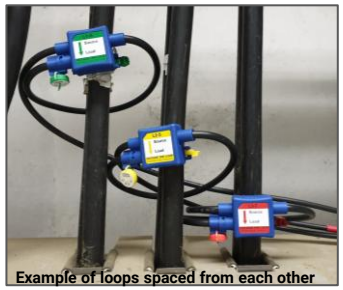
⚠ **To ensure a valid measurement,** the sensor loops must **encircle only the conductor(s) to be measured** and **not be intertwined**. **Each coil must be correctly locked** (visible hole) **and not twisted** *(fig. C)*.

Fig. C



The loops must be spaced from each other, fixing them using the supplied clamping clips (green, yellow, red) to position on the "ears" of the sensor.

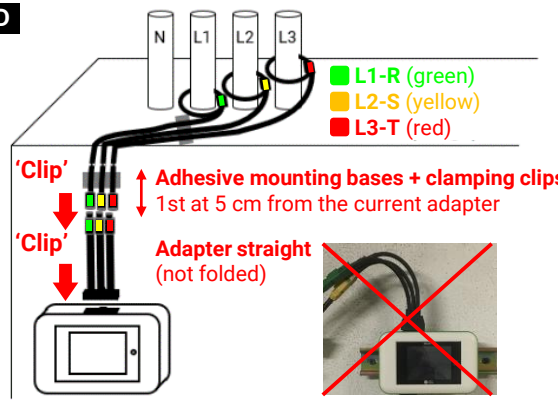




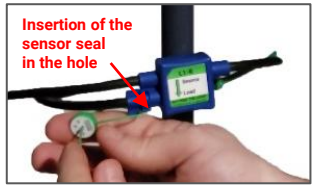
Then connect the **current adapter** to the Smart X then **connect each coil to the adapter** (respect color matching) while holding the plastic part of the connector until you hear the connection 'clip' (without forcing). **The adapter must remain straight** (not folded).

Install the adhesive bases provided along the cables in order to strengthen the installation and not put too much strain on the connections *(fig. D, **1st at 5 cm max from the current adapter**)*.

Fig. D



Once the measurement validated (see installation certificate)**, seal the sensors using the provided seals.**





Notes:

- ** Otherwise, it is possible to measure a part of these conductors (same number of conductors measured for each phase). Indicate it imperatively in the installation certificate.*
- *If the electrical panel supplies a capacitor bank or has downstream power generation units, it is necessary to measure each of these points independently. Contact Smart Impulse.*
- *To disconnect a sensor from the current adapter, press the locking clip and pull while holding the coloured plastic part of the connector on the adapter side.*
- *To disconnect the current adapter from the Smart X (off mode), press the locking clip using insulated flat screwdriver.*

POWER 3

Depending on your installation *(network wiring fig.E)*:

> If no Smart X is already installed, first connect the **3-phase lead** to the Smart X then insert the magnetic connectors* **on the screws downstream the closest low voltage modular circuit breaker, while respecting the positioning of the neutral and the order of the phases.** (*fig. F, **max voltage 300 V_{RMS}, neutral first***).

> If a Smart X is already installed on the same electrical network, you can connect to it via the **'bridge' lead** (*fig. G, **3-phase 'star' configuration only, excluding power supply with a single-phase lead, 3 Smart X max***).

The screen of the Smart X lights up.

**If magnetic connectors are not available in your country, connect directly the 3-phase lead downstream the closest low voltage modular circuit breaker.*

⚠ Connect first the lead to the 'IN' port of the Smart X, then to the network. 'OUT' port is strictly dedicated to sharing power supply between Smart X via the 'bridge' lead.

Fig. E

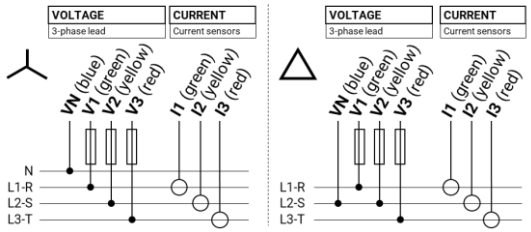
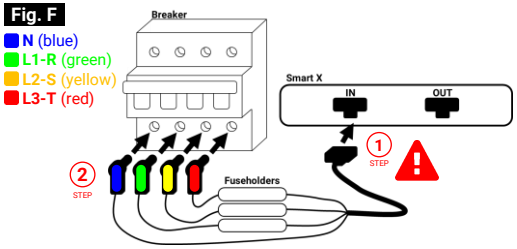


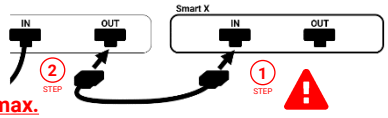
Fig. F



Neutral 1st. Max voltage 435 V_{RMS}.
Respect the order of the phases.

OR

Fig. G



3 Smart X max.
3-phase 'star' configuration only, excl. single-phase lead

COMMUNICATION 4

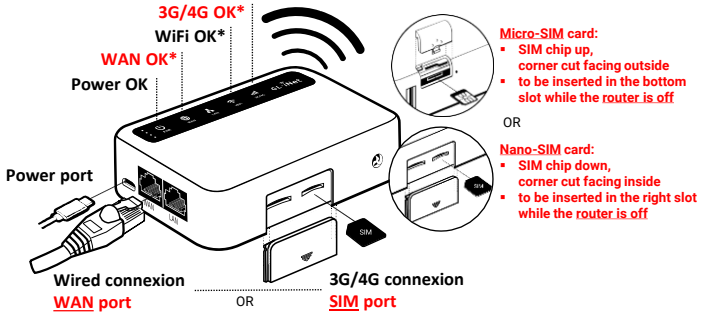
> For a wired communication, connect a Wi-Fi router to the local network (**WAN port**). *Before the installation, please provide an Ethernet cable and check with your IT department for outgoing connection authorisation to our server :*

- ICMP protocol to 8.8.8.8 (ping), DNS
- TCP protocol to 178.33.106.9, port 443 (HTTPS – TLS 1.2)*
**Port 80 (HTTP) for Smart X delivered by Smart Impulse before September 2024.*
- UDP protocol to time.google.com port 123 (NTP)

> For 3G/4G communication using your own subscription, insert the SIM card in the Wi-Fi router.

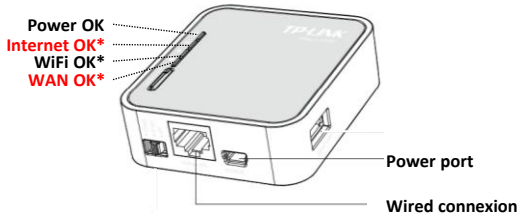
Then plug in the Wi-Fi router close to the Smart X installed *(a power outlet is necessary).* After 2 minutes, the Smart X in the same electrical room pair automatically to the Smart Router (Wi-Fi).

Example with GL iNet GL-MiFi or XE-300



OR

Example with TP Link MR3020



***Solid**: connected, **Blinking**: connected + data transfer in progress*

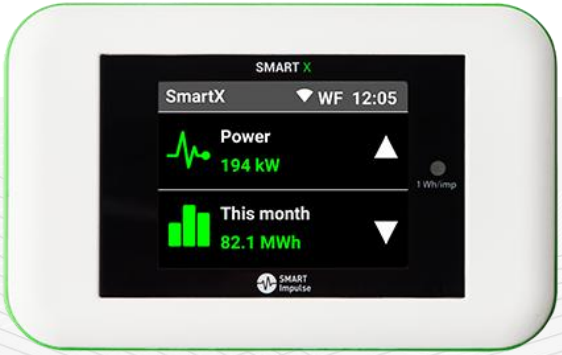
✔ INSTALLATION VALIDATION

Once the installation is completed, please fill in the installation certificate in order to **validate the compliance and correct operation of the installation** and **send it within 24 hours to support@smart-impulse.com imperatively with the requested photographs. The installation will only be validated upon receipt of these documents**. Thank you!

SMART Impulse

SMART X®

Quick Start Guide



Full user manual and video tutorial
http://doc.smart-impulse.com

Help Desk
+44 (0) 20 3695 6840
support@smart-impulse.com

INTERNATIONAL V4.7

Smart X – Made in France by Smart Impulse – 157 bd Macdonald – 75019 PARIS - FRANCE
Contains Transmitter Module - FCC ID: 2AC7Z-ESPWROOM02D - IC: 21098-ESPWROOM02D

CAT III 300 V

R 201-171000 R-R-iMp-SmartX