



HYDRA[®]
ELECTRIC VEHICLE CHARGERS



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Hydra Gateway

Dynamic Load Balancing

INSTALLATION MANUAL

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INTRODUCTION

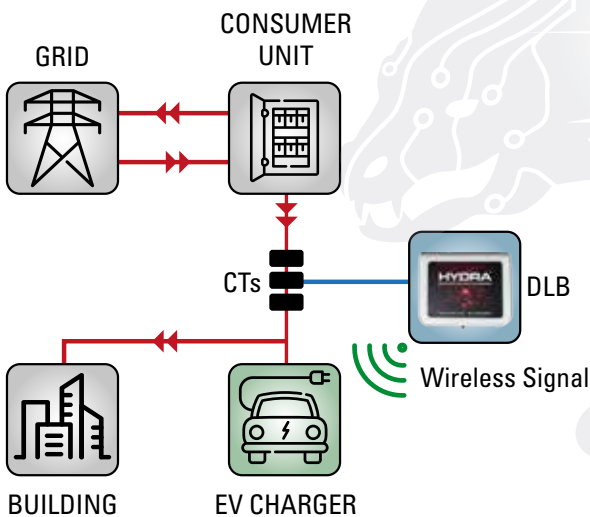


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This document details the installation guidelines for the Hydra Wireless DLB and gateway. The Wireless DLB consists of a Single/ Three phase ("SP/TP") rated MID energy monitor, three split core current transformers ("CT's") rated at the buildings maximum amps and a wireless ethernet gateway ("Gateway") for communication with NEXUS Cloud.

This document details important information about how to install and commission the gateway and associated meter and CTs.

A brief overview of the installation is as follows,



Overview of the Gateway installation

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MID METERS – PHYSICAL INSTALLATION

Hydra Gateway will work with the following meter,

- Eastron SDM630MCT-LoRa-MID 1/5A CT Operated SP/TP Multifunction Meter

Current Transformers for measuring site supply, one for each phase

- T24/T36 100/5A Up to 500/5A Split Core Current Transformer

HOW IT WORKS

The meter works on a private frequency where by it connects with the Hydra Gateway to export real time energy readings to the Hydra NEXUS Cloud platform.

LOCATION OF THE MID METER FOR THE SITE SUPPLY



Due to the design of the meter it is important that the output of the T24 current transformers are fed directly into the three phase MID meter i.e. no extension cables.

Each CT is polarity sensitive and must be positioned in accordance with the flow of energy.

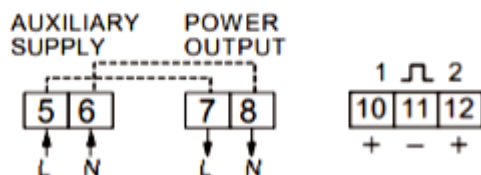
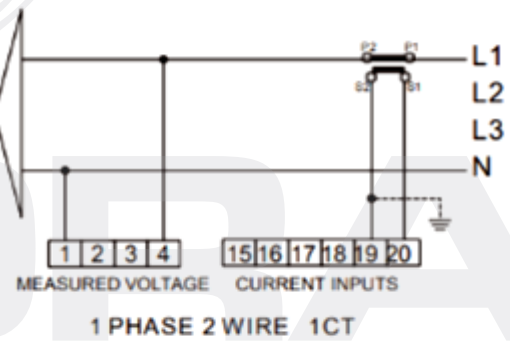
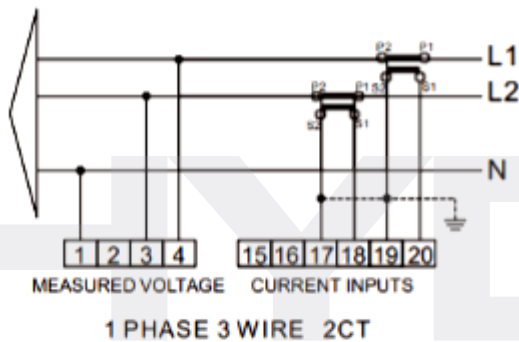
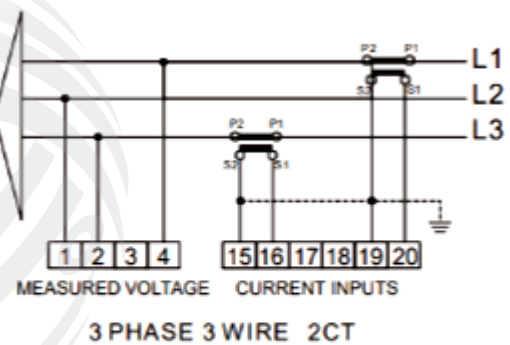
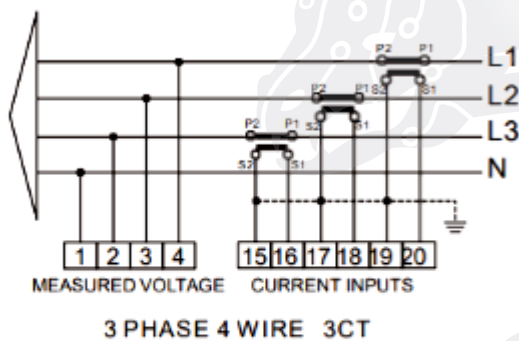


CONNECTING THE MID METER

Contained with the MID meter you should have received the following

- 1x SDM630MCT-LoRa-MID
- 3x T24/ T36 split Core Current Transformers

The MID meter needs to be wired in close proximity to the incoming supply before the main distribution board. Depending on the circuits rating either single phase or three phase you will need to wire the MID meter in accordance with the below wiring diagrams.



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INSTALLATION OF THE HYDRA GATEWAY

The Hydra Gateway will come with

- Hydra Wireless IoT Gateway
- Gateway wall mounting plate
- 1metre CatV Ethernet Cable
- Detachable Ariel
- 3 Pin 12v Power Supply



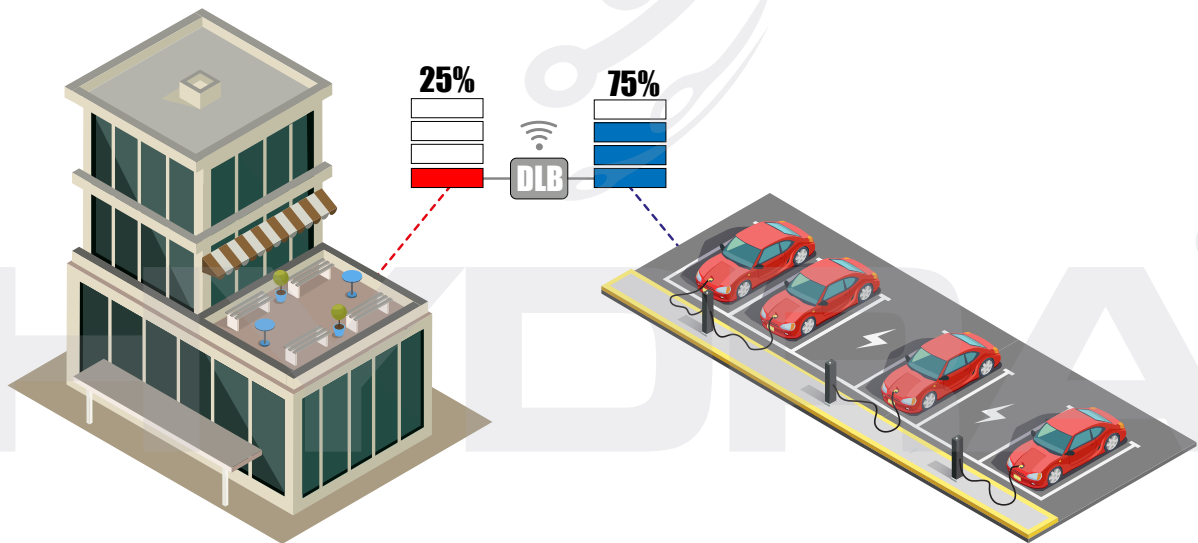
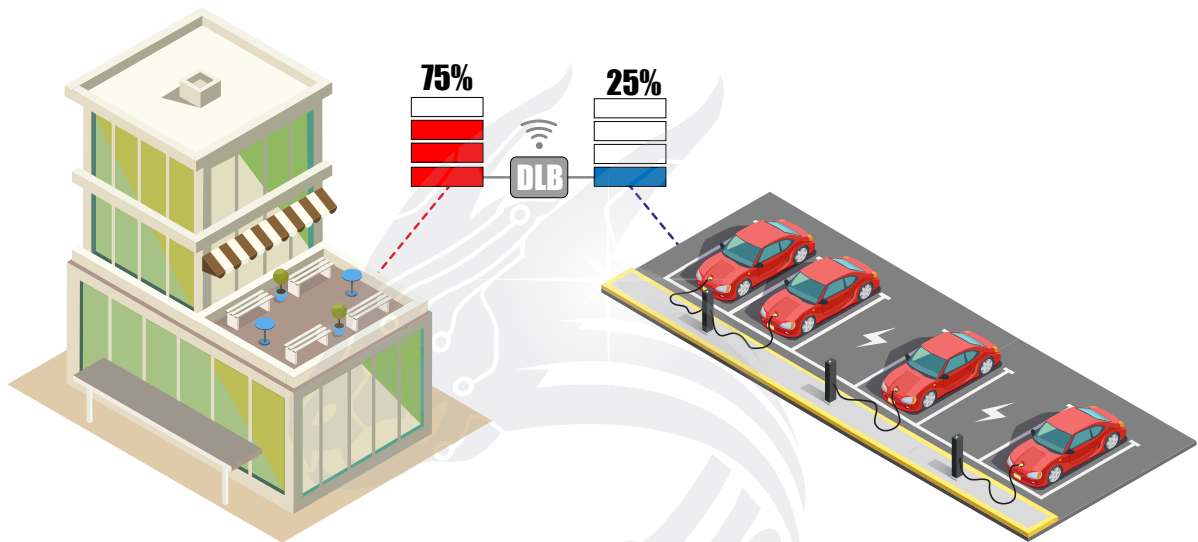
CONNECTING THE GATEWAY

- 1) Attached the Ariel to the gateway
- 2) Connect the CatV cable, one connection into the gateway – the corresponding connection into any CatV port
- 3) Connect the power supply to into a standard 3pin plug and into the gateway



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Once powered up the Gateway will automatically search for the frequency the MID meter is omitting. The Meter and Gateway will automatically connect and from there commissioning is completed via NEXUS Cloud.





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HYDRA EVC Ltd

Telephone: 01268 205 121

Email: sales@hydraev.co.uk

Unit 11, Totman Close, Rayleigh, Essex SS6 7UZ