

# MAXICHARGER DYNAMIC LOAD BALANCING EXPLAINED





### DYNAMIC LOAD BALANCING BENEFITS

Dynamic load balancing (known as DLB) is a smart method of ensuring a property's primary electrical load is not disrupted.

In the context of EV charging, DLB enables electric vehicles to recharge whilst simultaneously powering common electrical goods at the property. By balancing the primary electrical load in real-time, electric vehicles can be charged without causing disruption and power cuts at the property.

Integrating DLB into EV charge point installations allows constant monitoring of changes to energy usage and it allocates available energy capacity to different electrical appliances at the property, including EV charging points. By doing this, everyday use of electricity is not disrupted, ensuring safer and more efficient recharging of vehicles.



Eliminates risk of overloading electrical load, therefore protecting the grid.



Charge at any time with confidence, even during high demand.



Saves costs with no requirement for infrastructure/ construction works.



Scalable solution, allowing you to add more EV chargers in future.



### HOW THE MAXICHARGER'S DLB WORKS

Connect the energy meter to the MaxiCharger

The energy meter is connected to the MaxiCharger via a Modbus connection, RS485. This uses a data cable.

# Energy meter measures total consumption

The energy meter measures the total consumption of the supply, which is usually the primary electrical supply to the property.

As total consumption increases, the MaxiCharger will reduce energy output to ensure maximum power capacity is not reached. This prevents the electrical load from experiencing overload.

The primary electrical load (used for common electrical appliances) of the property is always prioritised over the EV charging point/s.

When multiple MaxiChargers are load balanced using the same supply, the connection to one charge point makes this unit the Master charger. The Master charger will then communicate with the other charge points, known as Secondary units, using the property's dedicated internet connection. In this scenario, all charge points must be connected to the property's dedicated internet connection. All charge points then respond to demand by reducing the output of the electrical load.

#### WHAT YOU'LL NEED





MaxiCharger

Autel App





CT Clamps

Energy Meter

See an example of a typical MaxiCharger Dynamic Load Balancing set up on the next page >

## Safe consumption of energy commences

### A TYPICAL MAXICHARGER DYNAMIC LOAD BALANCING EXAMPLE





# LEARN MORE ABOUT THE MAXICHARGER RANGE

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