



io7

Brighter EV Charging

Ratio io7

Innovative dual EV
charging pillar with
built-in professional,
high performance
lighting.





FW THORPE PLC

Ratio EV Charging is a joint investment between FW Thorpe Plc and Ratio Electric in the Netherlands.

Ratio EV Charging designs and manufacture EV charging products at it's factory in Redditch in the Midlands specifically to suit and serve the UK market.

Ratio Electric

Ratio EV Charging aims to create a sustainable future through innovation, and provide accessible and no nonsense products that enable people to move towards a world powered by renewable energy.

Established in 1960, Ratio Electric specialises in the development, manufacture and supply of electrical power connection and distribution systems in four core areas: EV chargers, EV cables, marine and power distribution units. Today Ratio Electric continues to supply high quality, functional and affordable products to OEM's, installers and specialised wholesalers.



About FW Thorpe

FW Thorpe Plc was founded in Birmingham in 1936 by Frederick William Thorpe and his son, Ernest. Based in a factory in Small Heath, Birmingham, the company initially designed and manufactured vitreous enamelled steel reflector luminaires.

Today FW Thorpe Plc specialises in professional lighting and control systems which are sold throughout the world, and currently employs over 900 people. The Group management team is passionate about developing the business for the benefit of the shareholders, employees and customers. It's aim is to create stakeholder value through market leadership in the design, manufacture and supply of lighting systems, with the additional EV charging division complementing the skillsets and customer base of the lighting businesses.



Sustainability

Ratio, as part of the FW Thorpe Group of companies, is committed to minimising the environmental impact of its activities across all operations.

The FW Thorpe Group of companies has been officially recognised as being carbon neutral, with systems of reduction, measurement and certified offsetting in place, since 2012. Third party assessment provides independent assurance of the Group's long-standing commitment to sustainability across all of its operations worldwide. Being carbon neutral means that FW Thorpe Plc offsets the carbon dioxide emissions it generates (scopes 1 and 2 of the Greenhouse Gas Protocol) by its business activities.

FW Thorpe Plc is a carbon neutral company through a combination of measures. Company-wide initiatives such as energy use minimisation, self-generation of renewable energy through solar photovoltaic (PV) units, and procurement of renewable energy have reduced the Group's carbon footprint, whilst trees in the Group's award-winning carbon offsetting afforestation project absorb the remaining carbon dioxide produced.

The Road to net-zero

In 2023, FW Thorpe Plc announced its ambitious climate target to achieve net-zero emissions by 2040 and set credible and robust science-based targets.

The SBTi has validated that FW Thorpe Plc's science-based greenhouse gas emissions reduction targets conform to the SBTi Corporate Net Zero Standard. The standard includes the guidance, criteria, and recommendations companies need to set science-based net-zero targets consistent with limiting global temperature rise to 1.5°C.



SCIENCE
BASED
TARGETS

DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

The goal is ultimately to reach net-zero in 2040, 10 years before the UK's target for achieving net-zero greenhouse gas (GHG) emissions by 2050.





179,412
trees planted
on 215 acres

Emission reduction targets

FW Thorpe Plc commits to reach net zero greenhouse gas emissions across the value chain by FY2040.

For more information, visit:

<https://sciencebasedtargets.org/companies-taking-action>

Near-Term Targets

- FW Thorpe Plc commits to reduce absolute scope 1 and 2 GHG emissions 57.5% by FY2030 from a FY2021 base year
- FW Thorpe Plc also commits to reduce absolute scope 3 GHG emissions 25% within the same timeframe.

Long-Term Targets

- FW Thorpe Plc commits to reduce absolute scope 1 and 2 GHG emissions 90% by FY2040 from a FY2021 base year.
- FW Thorpe Plc commits to reduce absolute scope 3 GHG emissions 90% within the same time frame.



Carbon offsetting

In 2009, FW Thorpe Plc purchased 215 acres of farmland in Wales. To date, 179,412 trees have been planted for carbon sequestration. Based on the Group's calculated emissions, it has been confirmed that enough trees have been planted for FW Thorpe Plc to have been carbon neutral since 2012.

The carbon capture tree-planting scheme (quality-assured by the government-backed Woodland Carbon Code) is independently certified to ISO 14064-3 and ISO 14065 standards. The Woodland Carbon Code is an independent standard, devised by a group led by the UK Forestry Commission, to certify that woodland creation projects can accurately measure how much carbon is captured and stored.

FW Thorpe has completed its woodland creation project in Devauden, Wales and has recently purchased a further 195 acres of land in Herefordshire. The land has significant potential for connecting existing woodlands for biodiversity and landscape enhancement and the transition from grazing sheep to woodland creation will have little to no impact on food security.

io7 Charging

The io7 has been specifically designed to enable EV charging in a multitude of environments.

The io7 can be configured to suit the user's power availability and charging needs, internet connectivity, lighting requirements and budget.



Retail



Hotels



Apartments



Carparks



Workplace





Features

- ⚡ **Extruded aluminium body** for long life and high durability
- ⚡ **Designed for easy of installation and maintenance**
- ⚡ **Maximised power capacity** - intelligent software ensures the optimum amount of charge to each vehicle
- ⚡ **Flexible payment/usage methods** including optional contactless payment, plug & charge, mobile app or RFID controlled charging
- ⚡ **OZEV** (Office for Zero Emission Vehicles) **grant approved**
- ⚡ **OCPP 1.6 compliant** enables connection to any 3rd party back office system
- ⚡ **Over-the-air software updates**
- ⚡ **Accessibility approved** PAS 1899 compliant
- ⚡ **Designed and manufactured in the UK**
- ⚡ **BSi Kitemark** accredited

io7 Lighting

The io7 has a high performance built-in illuminated head for general area lighting. The sophisticated LED optic provides excellent ground illumination and high light uniformity ensuring users are able to correctly and safely connect to the charger. The high performance nature of the illuminated head means that it can be incorporated into the overall exterior lighting solution of the site.

Emergency lighting*

The io7 is available with integral emergency lighting allowing for illumination of walkways in the event of an emergency. Where io7s are placed along emergency routes, the emergency lighting facility will illuminate the way to fire assembly points highlighting any cables or potential trip hazards on the way.

DESIGNED FOR TOUGH ENVIRONMENTS

The lighting unit is sealed to IP66.

DIE-CAST ALUMINIUM HEAD UNIT

Excellent thermal management of LEDs for long 100,000 hour life.

HIGH PERFORMANCE OPTICS

Superior luminaire spacing with high uniformity

Illuminate the car

The additional lighting aids location of the charging sockets, and provides illumination in the bonnet storage or boot area when finding the charging cable.

*optional extra



HIDDEN OPTICAL COMPARTMENT

Low glare and less than 2% upward light, a requirement for preventing light pollution in many inner city and rural applications.

Wireless controls

The io7 can offer superior lighting controls, emergency status reporting and energy management on the same platform as the building luminaire installation.

DUSK TILL DAWN LIGHTING

The io7 comes with a photocell as standard to switch lighting on and off when required.

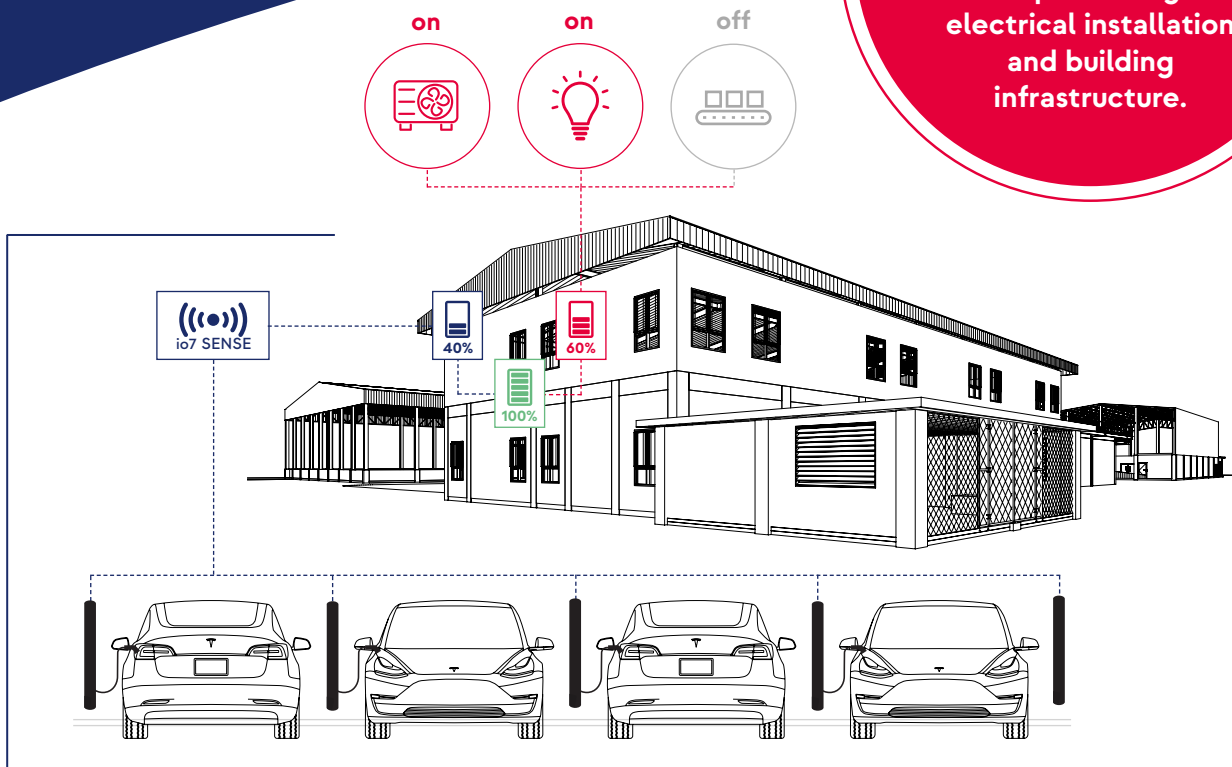
EXTRUDED ALUMINIUM BODY

Long life and high durability



Load Management

Load management of EV charging equipment is designed to maximise charging speeds whilst protecting the electrical installation and building infrastructure.



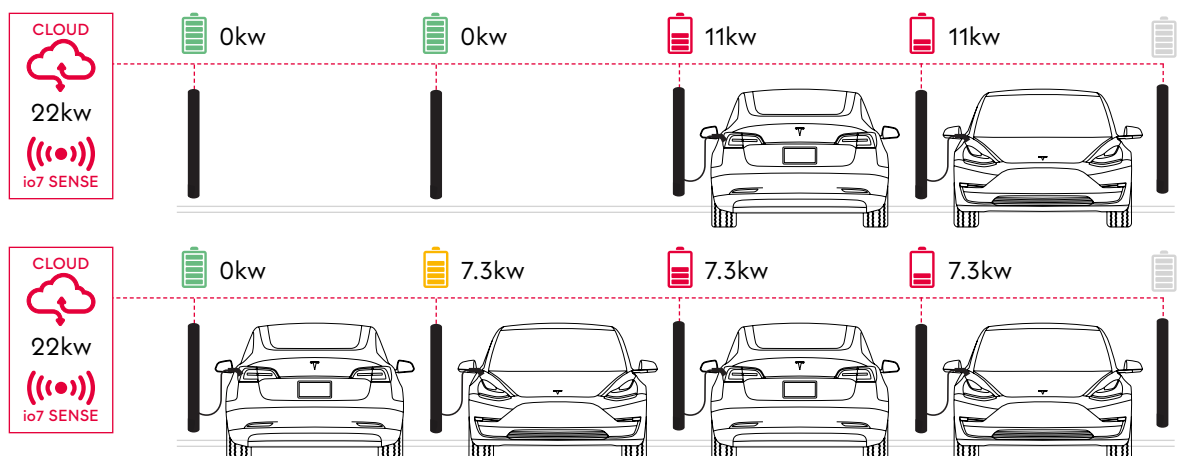
Dynamic Load Management

Monitors the building's energy supply and usage, calculating the power available and distributing it equally to the EV charger installation.

As the building power consumption increases e.g. heavy machinery being switched on or off, the io7 Sense will increase or decrease the power available to the EV charger installation.

Static Load Management

Involves the installation of EV charging equipment on a dedicated power supply that has a known fixed power capacity. The EV chargers are designed to effectively manage this power supply by evenly distributing the load between them as more sockets are utilised. This can be done at Cloud level (using back-office software) or locally to the chargers using the io7 Sense.





io7 Sense Lite



io7 Sense Pro



io7 Sense

The io7 is available with both static and dynamic load management systems.

		io7 Sense	
	Load Management available as standard	io7 Lite	io7 Pro
Static Load Management			
5 or less pillars	✓		
>6-16 pillars			✓
Dynamic Load Management			
>5 or less pillars		✓	
>6-16 pillars			✓

Product Code	Description
38903	io7 Sense Lite, 250A
38904	io7 Sense Lite, 400A
38900	io7 Sense Pro





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