

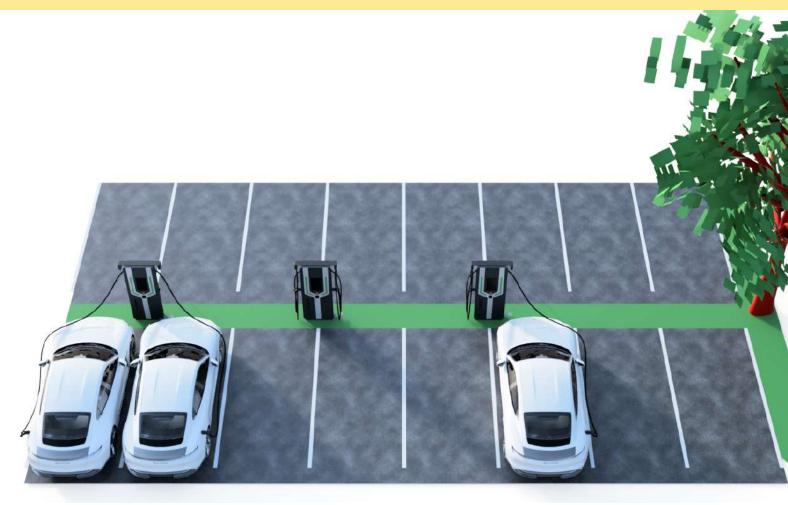
Experience the revolution of smart charging with Evonity's cutting-edge solutions. Welcome to the next-gen charging network with endless possibilities.

Prepare for the future of energy with our ground-breaking DC CFY series. Engineered to adapt to a variety of environments - residential communities, commercial spaces, bustling shopping centers, and large fleet complexes - our smart charging stations deliver unmatched solutions for your needs.

Our flagship models within the DC CFY series, exhibit not only impressive charging performance but also assure cost-effectiveness and scalability. These state-of-the-art designs answer the growing demand for electric vehicle compatibility and ensure the effortless expansion of your charging network as your demands evolve.

Choosing Evonity signifies your commitment to a forward-thinking approach to energy consumption. We don't merely offer a product; we extend a partnership, providing all-encompassing support and guidance as you transition towards a more sustainable future. Our objective is to assist you in transforming your spaces into dynamic hubs of renewable energy, positioning you at the forefront of the accelerating electric revolution.

With Evonity at your side, you're poised to meet the escalating demand for electric vehicle charging solutions effectively. Join us in shaping a cleaner, more sustainable, and energy-efficient tomorrow. Together, we can make the advantages of renewable energy accessible and inclusive for all. Allow us to navigate you towards a more luminous, eco-conscious, and electrified future.



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#### Multi-user access with RFID authentication

Seamlessly grant access through RFID authentication.



# Plug-and-Charge Ready (PnC) Seamlessly grant access through EVID authentication.



**Turbocharged EV Charging**The CFY is configurable in steps of 40KW up to 200KW DC **Charging Power** 



# **Designed for seamless management** and scalability

Our DC chargers are managable using the cloud based Evonity Cloud backend system.



Extensive connectivity options
Enjoy WiFi, Ethernet, and 3G/4G connectivity, along with OCPP 1.6j and OCPP 2.0.1 compatibility.



# EMS Integration with MODBUS TCP

Can be integrated into existing or new energy management systems using Modbus TCP



# **Future proof**

Our DC Chargers are modular designed and built. Which gives you the possibility to upgrade with new functions, both with soft and hardware in the future.



# **Advanced Loadbalancing**

Different loadbalancing techniques are available, ranging from static, energy meter but also advanced EMS loadbalancing.



Discover the ideal DC CFY configuration, precisely crafted to align with your specific sustainability and electrification aspirations. Personalize your journey towards a more sustainable future by choosing the DC CFY model that best complements your distinct needs. This paves the way for a future where energy-efficiency is realized according to your unique vision.

All our products can be configured with several options like: Ethernet/3G-4G/Wifi connectivity, OCPP compliance, MID Certified energy meters for legally accepted and accurate invoicing purposes, RFID, Load Balancing, Charge scheduling, Solar charging, Over the air Updates, Payment terminal integration,...

DC Charger CFY Series Model							
	CFY Series						
Mounting							
Material Coated Aluminium Alloy and Steel combination	1						
Size (HxWxD) mm 2176 x 890 x 296							
Power 40KW to 200KW (in steps of 40KW)	40KW to 200KW (in steps of 40KW)						
Connection	<b>)</b> @						
Connection Details  1x CCS2  2x CCS2  1x CHAdeMO  1x CCS2  1x CHAdeMO  2x CHAdeMO	IAdeMO						
AC 30mA (for internal components)	AC 30mA (for internal components)						
Load Balancing							
Payment Terminal <sup>2</sup>							
Sim / 4G / Ethernet							
MID metering <sup>3</sup>							
OTA <sup>4</sup>							
RFID							
OCPP							
Solar 5							
LED Indicator lights							
E-stop circuit							
Screen 24 inch touch screen	24 inch touch screen						

<sup>1</sup> Optional Type B RCCB 6mA available

<sup>2</sup> Optional worldline payment terminal

<sup>3</sup> Optional AC Metering, future upgradeable to DC MID Metering

<sup>4</sup> Including remote monitoring

In combination with certain solar energy meters and/or EMS system integration

#### **Highlighted options**

#### DC Link power sharing technology

This option allows for the integration of two standalone CFY installations into a single, powerful CF4Y-400KW model. This unique setup enables dynamic power distribution to each charging point, effectively responding to the number of vehicles connected at any given time. This flexibility ensures efficient utilization of the available power, catering to your varying charging needs.



#### Cable management system

In scenarios where a cable length greater than 3.5 meters is required, we advise our customers to consider our optional cable management systems. These systems enhance the ergonomic usability of the charging infrastructure and prevent the cable from making contact with the ground when not in use, ensuring additional convenience.

#### **Payment Terminal**

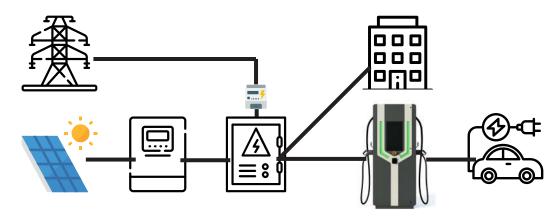
As an official partner of Worldline, Evonity has the capability to incorporate a payment terminal directly into the charger. This offers users the convenience of making instant payments using a credit or debit card, preserving the familiar experience reminiscent of traditional 'gas station' transactions. Our goal is to seamlessly blend the comfort of the past with the technological advancements of the present.

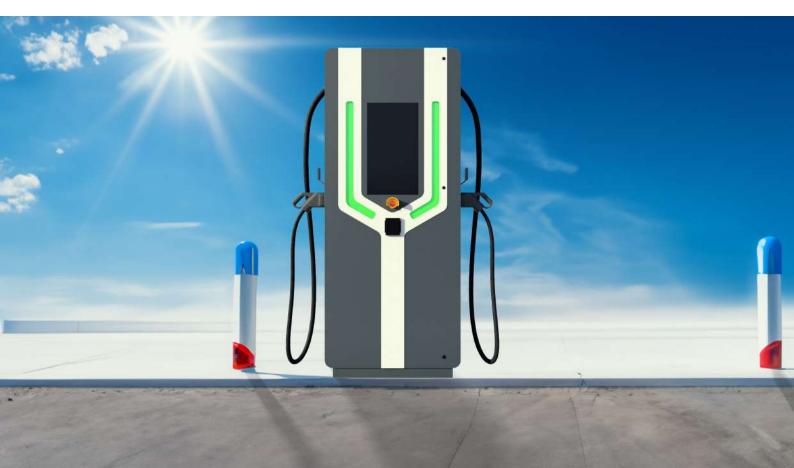


#### **SOLAR CHARGE**

Capitalize on solar energy to power your electric vehicles by leveraging compatible bi-directional energy meters such as the Xemex SCC, or our recommended choice, the EASTRON SDM630. The utilization of a bi-directional energy meter allows the system to identify surplus energy, offering an environmentally friendly and cost-effective charging solution that maximizes your renewable energy resources. If you're contemplating using energy meters from alternate brands, we warmly invite you to get in touch with us to discuss the range of possibilities that we can support.

By evaluating the inputs from the energy meter, including the current - either positive or negative - in conjunction with pre-set parameters, the controller can accurately determine the availability of adequate solar power for charging the electric vehicle. This intelligent approach ensures optimal utilization of solar power, promoting a sustainable charging solution.

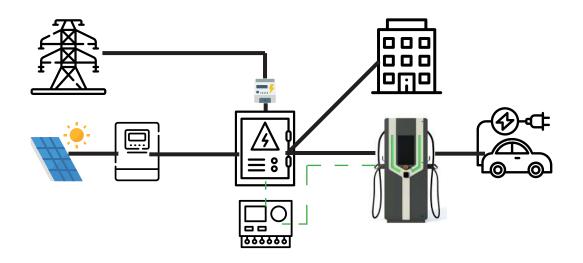




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### **MODBUS TCP - EMS INTEGRATION**

Experience seamless Energy Management System (EMS) integration through the utilization of Modbus TCP, a proven industry-standard protocol. By employing this open architecture network protocol, you can effortlessly connect and communicate with a multitude of devices across your network, streamlining your EV charging infrastructure management. Modbus TCP allows for real-time monitoring and control, improving efficiency, and providing invaluable data for your operations. We encourage you to leverage this technology for advanced, holistic control over your energy consumption and distribution, enabling you to effectively meet your sustainability goals.



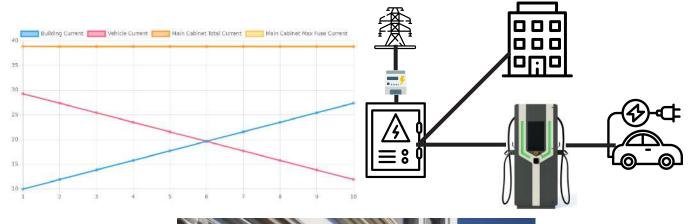


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#### LOAD BALANCING

Even without a solar panel setup, you can effectively utilize conventional energy meters with our systems. We highly recommend the Eastron SDM630, a reliable and trusted device recognized for its compatibility and performance. Should you contemplate alternative energy meters that match the same Modbus RTU registers as the Eastron SDM630, these are likely to be well-integrated within our infrastructure. We strongly encourage you to get in touch with us for any inquiries or clarifications regarding the use of different energy meters.

Smart implementation of energy meters in our system lays a solid foundation for dynamic load balancing. This crucial functionality ensures balanced power distribution among connected electric vehicles. By examining inputs from the energy meter, including the current, our chargers can efficiently cater to the charging needs of EVs, staying within the constraints of the main fuse and defined parameters. This intelligent power management optimizes energy use, paving the way for an efficient, economical, and robust charging solution.



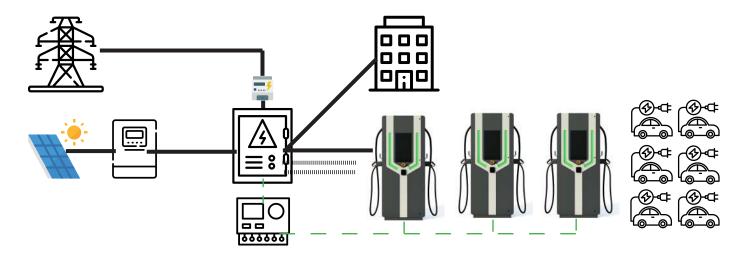


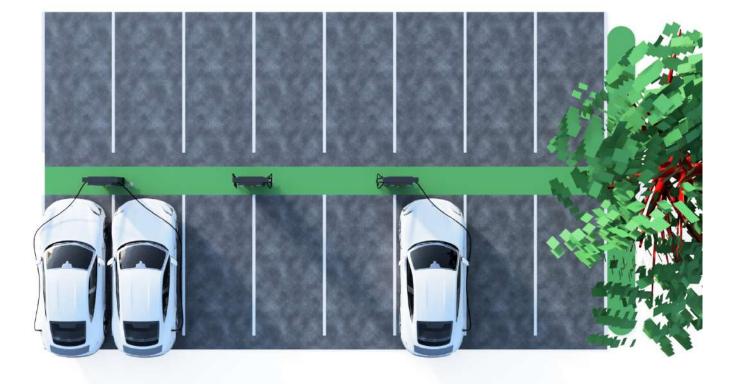
#### **MULTI CHARGER SETUP AND INSTALLATION**

Each DC CFY charger draws its power independently from the main electrical cabinet, maintaining a dedicated power supply for efficient performance.

The real novelty lies in the communication between the chargers, achieved via MODBUS TCP. This industry-standard protocol ensures smooth communication between the chargers and the EMS, minimizing complexity and making the setup straightforward.

In this innovative configuration, each charger interacts with the EMS, receiving instructions and sending feedback directly. This not only ensures effective load balancing but also offers an intuitive and efficient management solution, fostering smooth and coordinated operation across the charger network.





#### CONTINUOUS DEVELOPMENT

At Evonity, we are firmly committed to continuous innovation, consistently enhancing our offerings with the development of new functionalities. Our valued customers are invited to stay abreast of these advancements by visiting our website at www.evonity.com. Join us as we relentlessly push boundaries in creating a more sustainable and efficient electric future.

### **CUSTOM BRANDING**

We offer custom branding options including distinctive labeling and a range of RAL color choices, bringing a personal touch to our robust solutions. These personalized options are available based on the quantity of your order. For further information or to discuss your unique requirements, please do not hesitate to reach out to us at Evonity.

# **SPECIFIC PROJECT QUESTIONS?**

We welcome our customers to reach out to us with specific requirements concerning their electric vehicle (EV) projects. Whether you need expert advice or assistance in optimally integrating our solutions into your initiatives, the Evonity team is at your disposal. Together, we can design a path that best suits your unique EV objectives.



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# THE CFY SERIES Product specifications

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OPERATING TEMPERATURE: -25°C / +75°C (output derating > 55°C)

RELATIVE HUMIDITY: 0% - 95%

ELECTRICAL SAFETY CLASS:

DEGREE OF PROTECTION: IP54
MECHANICAL IMPACT: IK10

INSTALLATION SITE: Indoors and outdoors

INSTALLATION ALTITUDE: No de-rating below 2000m a.s.l

COOLING: Forced air cooling

STANDBY POWER CONSUMPTION: ± 150 W (depends on configuration and options)

NOISE EMISSION: ≤**70 db** 

#### **CERTIFICATIONS/STANDARDS**

CE COMPLIANT:

ISO 15118 COMPLIANT: ✓

#### **ELECTRICAL**

EFFICIENCY: ≥ **95 %** 

CHARGING CAPACITY: 40kW – 200kW <sup>1</sup>
DC OUTPUT VOLTAGE: 350 – 1000VDC

DC MAX. OUTPUT CURRENT: **250ADC** 

NOMINAL VOLTAGE: **3PH+N 400VAC +/- 10%** 

NOMINAL CURRENT: 75A – 375A

NOMINAL FREQUENCY: 50Hz
CONNECTION TYPE: CCS2 <sup>2</sup>

CHARGING CABLE LENGTH: Standard 3,5m<sup>3</sup>

RESIDUAL CURRENT DETECTION: AC 30mA for internal components 4

OVER VOLTAGE PROTECTION:

UNDER VOLTAGE PROTECTION:

OVER LOAD PROTECTION:

SHORT CIRCUIT PROTECTION:

EARTH LEAKAGE PROTECTION:

OVER TEMPERATURE PROTECTION:

TUDGE PROTECTION:

SURGE PROTECTION:

<sup>&</sup>lt;sup>1</sup> Up to 400kW if two installations are DC linked together

<sup>&</sup>lt;sup>2</sup> (CHAdeMO optional)

<sup>&</sup>lt;sup>3</sup> 5m and 7m optional

<sup>&</sup>lt;sup>4</sup> External type B RCCB 6mA required (can be offered optionally)

#### **COMMUNICATION**

CONNECTIVITY: WIFI, ETHERNET, 4G
COMMUNICATION PLATFORMS: EVONITY / OCPP1.6J

#### **OPTIONS**

PAYMENT TERMINAL:	<b>~</b>
CAMERA SURVEILLANCE:	<b>~</b>
CONCRETE BASE FOR INSTALLATION:	<b>/</b>
COLOR CUSTOMIZABLE INCL. LOGO'S:	<b>~</b>
RCCB RESIDUAL CURRENT CIRCUIT BREAKER TYPE B:	<b>~</b>
CABLE GUIDING SYSTEM FOR THE CHARGING CABLES:	<b>~</b>
5M CHARGER CABLE INSTEAD OF STANDARD 3M:	<b>~</b>
7M CHARGER CABLE INSTEAD OF STANDARD 3M:	<b>/</b>
CHADEMO CONNECTOR (INSTEAD OF CCS2 CONNECTOR):	<b>/</b>

# Flexible design and modularity

With the current logistics issues regarding the global chip problem and past pandemic, we are equipped to modify our used chipsets blazingly fast and act accordingly to the market need and demand. Both hardware and software is developed in-house in Belgium making us much more agile in development and future upgrades.

#### Need to know more?

Contact us at:

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