

## Data sheet

# go-e Charger PRO

## up to 11/22 kW

Stationary charging station for electric vehicles According to EN IEC 61851-1:2019

## Smart wallbox for professional use cases for business and private purposes

Charges reliably and safely any electric car and plug-in hybrid. Provides all features for intelligent charging at any location thanks to numerous communication interfaces.

MID-compliant energy meter V2X ready + Plug & Charge ready (in accordance with ISO 15118) Charging power from 1.4 kW to 11/22 kW (single-phase or three-phase)



PRO

go-e

# **go-e Charger PRO** Highlights

Intelligent and reliable charging thanks to the **integrated MID-compliant energy meter in almost every professional use case**\*, both in the business and private sector. The go-e Charger PRO offers the smart features you are used to from go-e, such as **PV surplus charging or charging with flexible energy tariffs**. The wallbox also enables data exchange via the **most common communication interfaces** and is **in accordance with ISO 15118 V2X ready**\*\* **and Plug&Charge ready**\*\*. Even more convenient and efficient charging at an excellent price-performance ratio. **Scalable thanks to load balancing and open interfaces**. Easy to install, convenient to use and always intelligently connected. The go-e Charger PRO features a permanently attached charging cable with a type 2 plug. A version with a type 2 socket will be added to the product portfolio in the future.

#### **Quick installation and commissioning**

Compact and lightweight. The go-e Charger PRO can be installed easily and put into operation within a very short time. The wallbox is **suitable for indoor and outdoor use thanks to its IP55 protection class**. The electrician simply attaches the wall mount, inserts the power connection cable and fixes it. **The power cable can be fed in from behind, below and above, providing maximum flexibility for every location.** Finally, the charging unit is attached and bolted in place. After that charging is possible without any further setup. Additional initial setup can be done via the app or alternatively through the go-e backend , which can be used to commission a large number of chargers in a very short time. This ensures the wallbox is prepared for special usage scenarios.

#### **Convenient handling**

The go-e Charger PRO is equipped with a permanently attached charging cable with a type 2 plug. It can be used to charge almost every electric car and plugin hybrid commonly used in Europe, as these usually have a type 2 connector. Forwards, backwards or sideways, **the 6 m long charging cable**<sup>\*</sup> **adapts flexibly to any parking situation**. Once the charging process is complete, the cable management is intuitive and the charging cable can be stowed safely and compactly around the go-e Charger PRO.

The charging station **indicates the current charging status via the LED ring**. This can also be tracked via the **free go-e app or go-e backend**, which can be used to control and manage the charger locally and worldwide. Highest manufacturing quality - **Made in Austria** - ensures long-lasting and low-maintenance handling. **Continuous updates** that the charging station offers all the latest features.

## Additional interfaces for reliable data exchange and even smarter charging

Besides to wireless data transmission via **WiFi and cellular network (LTE)**, the go-e Charger PRO offers wired data exchange via **Ethernet**. This ensures smart charging and connection to external systems at any location. The initial setup or changes to basic and convenience settings are also possible without internet access thanks to **Bluetooth**. In addition, the wallbox can be controlled via a digital input and output. Various **open API interfaces and OCPP** enable connection to thirdparty software such as **backend systems, energy management systems, PV surplus or billing systems**.

### Cost-effective and sustainable with PV surplus, favourable electricity prices & bidirectional charging\*\*

Intelligent features such as the **scheduler** or **automated charging with PV surplus** help to save costs, just like **charging with flexible energy tariffs**, which are already integrated into the go-e app. This not only pays off financially but also reduces the load on the power grid.

On the hardware side, the go-e Charger PRO is **prepared for V2X functionalities**<sup>\*\*</sup> **in accordance with ISO 15118**. These include vehicle-to-grid (V2G) or vehicle-tohome (V2H), often also known as **bidirectional charging**<sup>\*\*</sup>.

\*\*Functionality is prepared on the hardware side and will be provided as an feature at a later stage via software update.

<sup>\*</sup>The go-e Charger PRO is expected to be available from Q1/2025 as a variant with a calibrated meter in accordance with the German Metering Act, which will cover additional use cases.

# **go-e Charger PRO** Highlights

# Legally compliant billing of charging current thanks to MID

The integrated **MID-compliant energy meter** ensures that charging current can be billed precisely to the exact kWh, even if there is no separate power connection with a calibrated meter available for the charging station. This means that the charging current can be offset or reimbursed in many application cases. Ideally suited for companies, fleet management or property management, company car drivers who charge at home, condominiums or for pure rental properties. The charging current can be clearly assigned to a person via user identification and authorisation. In the future, go-e will also enable charging in compliance with measurement and calibration law, which must also be guaranteed in individual applications.\* The charged current can be read off not only via the app or a backend but also directly via the LED display integrated on the front.

### Scalable thanks to load balancing, even for large parking areas

The go-e Charger already offers **static load balancing without additional hardware**, allowing a large number of vehicles to be charged at the same power connection - prioritisation for individual charging stations is possible. In addition, the go-e Controller, OCPP or open API can be utilised to take advantage of **dynamic load balancing**. This means that the charging power is continuously adapted to the currently available electricity, even taking surplus PV power into account. In this way, a **charging network with hundreds of charging stations** can be set up without having to worry about a power outage. At the same time, you can avoid peak loads and reduce costs.

#### Authorisation via RFID or Plug&Charge\*\*

When delivered, the charging station allows free charging. However, this can be switched to authorisation. The go-e Charger PRO offers **user authentication, enabling the charging process and clear assignment of charging processes to specific persons** via the integrated RFID reader. The device is supplied with a paired RFID tag. Additional RFID tags can be taught in, even for several chargers simultaneously via the go-e backend or other backend systems. **Conventional credit cards or RFID tags already in use within companies are also compatible**, as long as they transmit at a frequency of 13.56 MHz. **Detailed charging data** is provided for individual users. **Activation via app** is also possible.

The go-e Charger PRO is **Plug&Charge ready**\*\* in accordance with ISO 15118. In future, this will allow for the authorisation, activation and billing of charging processes without the user having to enable the charging process via RFID or app.



#### Charging capacity up to 3.7, 7.4, 11 or 22 kW

The go-e Charger PRO can be connected single-phase and three-phase. When connected three-phase, the charging power is limited to a maximum of 11 kW on delivery (single-phase 3.7 kW). However, all components are designed for a charging power of up to 22 kW. As part of the setup process, the installer can increase the maximum charging power for the three-phase connection to 22 kW (single-phase to 7.4 kW) via the app or installation backend.

\*In the future, a variant with a type 2 socket will be added to the product portfolio.

\*\*Functionality is prepared on the hardware side and will be made available as a function at a later stage via a software update.

# **Technical data** go-e Charger PRO



### Scope of delivery

### PRO CABLE | PRO CABLE ME

1 x charging station with permanently attached charging cable and type 2 plug (according to IEC 62196)

Charging capacity limited to 11 kW on delivery, can be increased to 22 kW by the installer 1 x wall mount

2 x cable clamps + 2 x cable ties 3 x large + 3 x small grommets

1 x sealing sticker

9 x TX20 screws + 4 x wall plugs

1 x RFID tag (already taught) + 1 x reset card

1 x quick reference guide

### **Product specifications**

		PRO CABLE / PRO Cable ME	
Stationary charging station		According to EN IEC 61851-1:2019	
Dimensions (B x	H x D)	Approx. 18.6 x 29.7 x 9.9 cm	
Weight (without	charging cable)	Approx. 2 kg	
Mounting types		Wall, stand/pillar	
Charging cable	Length	6	m
Charging cable	Cross section	5 x 6 mm² +	1 x 0,5 mm²
Grid connection cable	Permissible cable cross-section	3 x 1.5 mm² - 5 x 10 mm²	
(to be supplied by installer)	Permissible cable diameter	10 mm - 20 mm	
	Cable routing options	from above   below   behind	
Connection (nur	nber of phases)	Single-phase or three-phase	
Rated voltage			
Rated voltage (MID)		230 V - 240 V (single-phase) / 400 V - 415 V (three-phase)	
Nominal frequency		50 Hz	
Rated Current		16 A (single-phase / three-phase)	32 A (single-phase / three-phase)
Power grid types		TT / TN / IT	



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### Charge point management

		PRO CABLE / PRO Cable ME	
Local or worldwide* manage- ment and monitoring		go-e app go-e backend or via external backend system	
Monitoring para	meters	Voltage, current, power, energy	
Adjusting chargi	ng power	Adjusting the current level in 1 ampere steps	
Photovoltaic sur	plus charging	Photovoltaic connection via go-e Controller (separate product) or open API interface (programming required) or alternative energy manage- ment system*	
Charging with fle energy tariffs*/*	-	Charge automatically during the hours with the lowest electricity prices	
Phase switching		1-/3-phase switching via app or automatically with go-e Controller - even during the charging process	
Start/stop functi and scheduler	on	Start and stop charging as required Restrict charging or set charging periods	
kWh limit		Set a maximum desired amount of energy	
Charging log / do of the charging s		Synchronisation of charging processes with the cloud and display of the past charging processes*	
Load balan-	static	Distribution of the power available at the connection to several chargers for optimum utilisation and protection against power failure - prioritisation possible	
cing*	dynamic (with Controller or other EMS)	Extended blackout protection through continuous monitoring of the cur- rent power consumption in the building and adjustment of the charging current	
Management of	RFID tags	Locally up to 10 users per Charger   Unlimited number via OCPP	
		RFID tag / RFID card	
Authorisation m Access and user		Арр	
		Plug & Charge ready*** according to ISO 15118	
	Basic	Simple charging without special settings	
Charging modes	Eco*	Sustainable and economical and therefore particularly favourable charging	
	Daily Trip*	Set energy target and time for the end of the charging process	
Push notifications*		Automatic notifications about the charging status	
Firmware updates*		Regular function and security updates keep the Charger young	
Bidirectional charging		V2X ready*** according to ISO 15118	

\*Internet connection of the Charger required

\*\*Contract with an electricity provider whose flexible electricity tariff is integrated in the go-e app is required. Several 100 tariffs are stored. The number of tariffs is constantly being expanded.

\*\*\*Functionality is prepared on the hardware side and will be provided as a function at a later stage via a software update.



### Communication interfaces and protocols

PRO CABLE / PRO Cable ME		
RFID	13.56 MHz	
WiFi	802.11b/g/n 2.4 GHz / frequency band 2412-2472 Mhz	
Bluetooth	BLE ready (2.4 GHz)	
Cellular	LTE FDD (B1/3/5/7/8/20) / GPRS / EGPRS (GSM 900MHz/GSM-DCS 1800 MHz)	
Ethernet	10/100 Mbit/s, RJ45 connector, LSA terminals	
Digital Input	2 x non-isolated inputs, maximum +/-12 V to PE, connect to provided reference contact to close	
Digital Output	1x fully isolated switching contact to support fault isolation or other regula- tory requirements. 250 V AC / 30 V DC, 2 A	
Power Line Communication	Physical layer in accordance with ISO 15118-3	
API	Open and documented local + cloud HTTP API, Modbus TCP, MQTT	
OCPP 1.6 (Json)	Communication with backend systems for smart charging and billing of transaction costs	

## **Cellular specifications**

	PRO CABLE / PRO Cable ME	
Mobile phone contract	At least 5 years of free cellular connection.	
·	Extension possible for 12 euros incl. VAT per year.	
SIM card type	Factory-integrated eSIM from go-e (not exchangeable). Factory-installed customer-owned nano-SIM for larger B2B projects.	
Activate/Deactivate	At any time via go-e app or API	
	Standard: 4G LTE Cat-1	
Connection types	Fallback in case of limited reception: 2G / EDGE	
	Unlimited cellular connection in all <b>EU countries, Great Britain</b> ,	
Country availability go-e tariff	Switzerland, Norway and Liechtenstein.	
Mobile networks	An overview of the mobile networks used in the above-mentioned count- ries is available on the go-e website in the Support/FAQ section.	

### Overview of network interfaces go-e Charger series

	HOME series	Gemini series	Gemini 2.0 series	PRO series
WiFi hotspot	Yes (can be disabled)	Yes (can be disabled)	Yes (can be disabled)	<b>yes</b> (can be disabled)
WiFi connection	Yes	Yes	Yes	Yes
4G / LTE	No	No	Yes	Yes
2G / Edge (Fallback)	No	No	Yes	Yes
Bluetooth	No	No	No	Yes
Ethernet	No	No	No	Yes



	Using WiFi / Ethernet	Using cellular
App connection	Yes	Yes
OCPP <sup>1</sup>	Yes	Yes
Dynamic energy tariffs	Yes	Yes
Static load balancing	Yes	Yes
Dynamic load balancing with go-e Controller	Yes (Internet connection required for Controller)	Yes (Internet connection required for Controller)
PV surplus charging with go-e Controller	Yes	Yes
Dynamic load balancing and PV surplus charging using other energy management systems	Yes (based on OCPP or API integration)	Yes (based on OCPP or API integration)
Charging log recording and export	Yes	Yes
Billing of transaction costs for charging sessions with an exter- nal backend system	Yes (based on OCPP or API integration)	Yes (based on OCPP or API integration)
HTTP Cloud API	Yes	Yes
MQTT API <sup>2</sup>	yes	No
Modbus TCP <sup>3</sup>	yes	No

<sup>1</sup>OCPP connection is established directly from the Charger. No tunnelling through the go-e Cloud. OCPP can also be used when the go-e Cloud connection is deactivated.

<sup>2</sup>MQTT connection is established directly from the Charger. When using WiFi, the connection to MQTT brokers is possible both in the local network and on the Internet. It is not possible to use MQTT via cellular connection due to the high data volume.

<sup>3</sup>As Modbus TCP connection to the go-e Charger has to be established by directly using an IP address, a connection via cellular network is technically not possible.

### Energy meter and status display

		PRO CABLE / PRO Cable ME	
	MID-compliant	Yes	
Energy meter	Compliant with measurement and calibration law	Version with calibration law conformity (go-e Charger PRO CABLE ME) ex- pected to be available from Q1/2025	
Dicplay of the	Total	Alternating visualisation via LED display integrated on the front	
Display of the charged kWh	Charging session		
Status indication		Readable via LED ring on the device and app	



## Safety functions

	PRO CABLE / PRO Cable ME
DC protection module with DC detection and additional AC detection	6 mA DC, 20 mA AC (An RCD type A must be installed on the building side and a miniature cir- cuit breaker must be connected upstream. The local installation regulations must be observed).
IP55	Protected against dirt and water, suitable for permanent outdoor operation
Electrical Protection class	I
Pollution degree	II
Access control	Can be activated if required. Authentication via RFID or APP possible. One learned RFID chip is already included.
Input voltage	Phase and voltage testing
Switching functions	Testing of the switching functions
Ground check	For TT, TN grids (deactivatable ground check for IT grid - Norway mode)
Current sensor	3-phase
Temperature sensors	Regulation of the charging current in case of overtemperature

### Charging capacity

PRO CABLE / PRO Cable ME			
	11 kW (16 A, 3-phase)	22 kW (32 A, 3-phase)	
Maximum charging power	3.7 kW 7.4 kW   (16 A, 1-phase) (32 A, 1-phase)		
	By app or backend		
Adjusting charging power	Via charging current in steps of 1 Ampere between 6 A and 16 A	Via charging current in steps of 1 ampere between 6 A and 32 A	

	max. 11 kW	max. 22 kW	Remark
Single phase	1.4 kW	1.4 kW	Country-specific limitations need
charging car <sup>1</sup>	to 3.7 kW	to 7.4 kW	to be observed
Two phase	2,8 kW	2,8 kW	Two-phase connection of the
charging car¹	to 7.4 kW	to 14.8 kW	charger is not possible
Three phase	4.2 kW	4.2 kW	go-e Charger switches trough the po-
charging car <sup>1</sup>	to 11 kW	to 22 kW	wer that is avaiable at the connection

<sup>1</sup>Charging power depending on the number of phases of the car's onboard charger



### Permissible ambient conditions

	PRO CABLE / PRO Cable ME
Installation site	Indoors and outdoors
Operating temperature	-25 °C bis + 40 °C
Storage temperature	-40 °C bis +85 °C
Altitude	Maximum 2.000 m above sea level
Relative humidity	Not more than 95 % (not condensing)
Impact resistance	At least IK08

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