POWER ELEKTRONİK

EFİNDUK

User Manual
Model No:
PWR-HOME
PWR-BUSINESS
PWR-BUSINESS DUO

Power Elektronik Electric Vehicle Charging Station

INSTALLATION & USER GUIDE

User Manual

Table of Content

Manual Information

This manual provides information about the usability and configuration of the E-Finduk which has been designed and tested to allow electric vehicle charging, according to IEC 61851.

This manual contains all the necessary information for a safe use and step-by-step configuration instructions.

Symbol List

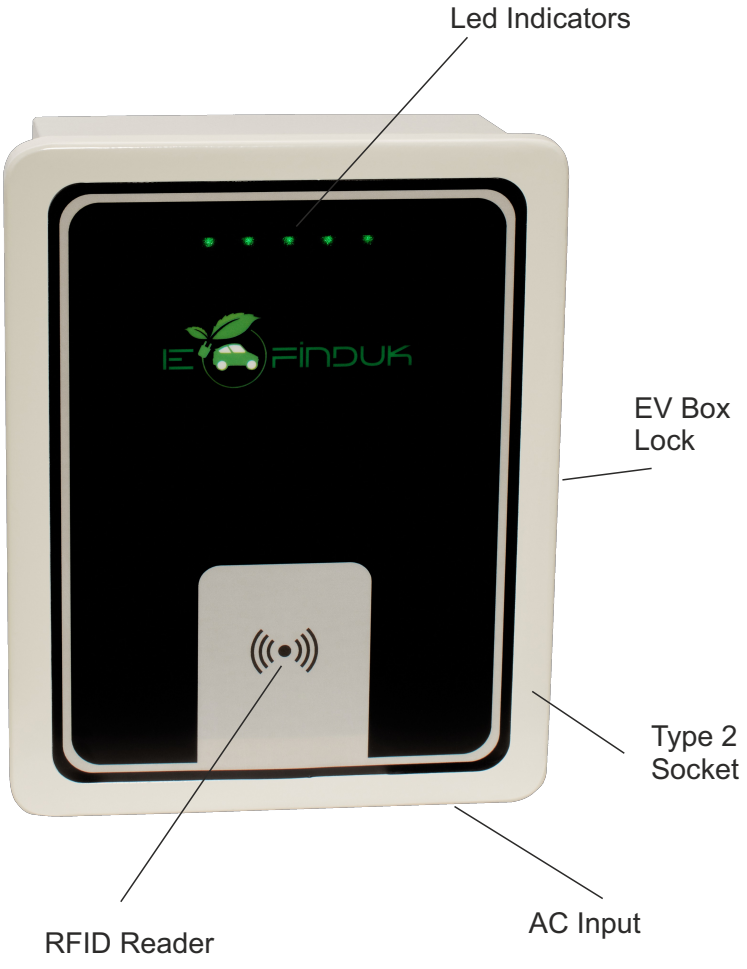
Indicates that damage to property can occur if appropriate precautions are not taken.

Informs about useful information to take on account

- Complies with IEC 61851-1, Electric vehicle conductive charging system (IEC 61851-1:2017)
- Complies with IEC 62196, Plugs, socket-outlets, vehicle couplers and vehicle inlets (IEC 62196-1 and IEC 62196-2).
- Standards: 2014/35/UE, LVD;2014/30/UE, EMC.

BUSINESS
Product Details

HOME
Product Details

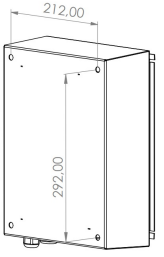


BUSINESS DUO
Product Details

Installation Instructions

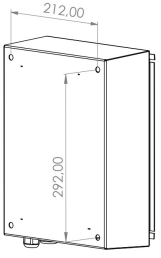
In Pwr Business Model, there is 3 type of installation.

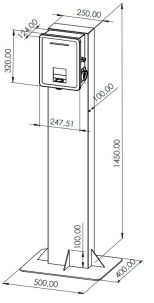
1) Wall Installation



- Four fixing part after installed to the EV Charger, drill holes to the wall according to the distances.
- Recommended installation height is 160cm from the bottom point.
- Fix four screw to the wall.

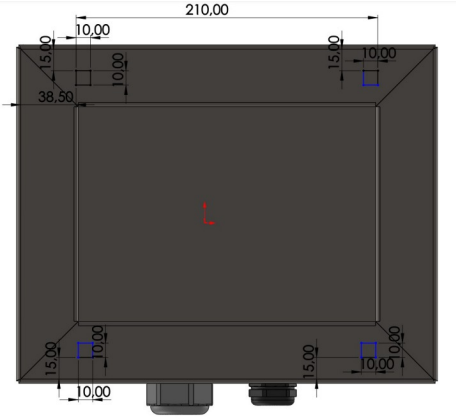
2) Floor Stand Installation

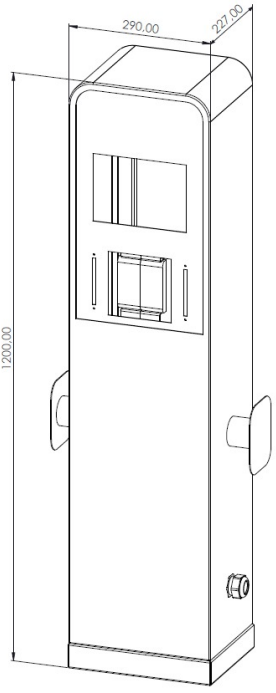




- Four fixing screw on behind of the EV Charger will be enough for installation to the Floor Stand.

3) Standalone Installation





- Four fixing screw on bottom of the EV Charger will be enough for installation to the Standalone.

Safety Information

Read carefully all the instructions before manipulating the unit.

The Charge Point may not include electrical protection elements.

- Read all the instructions before using and configuring this product.
- Do not use this unit for anything other than electric vehicle charging.
- Do not modify this unit. If modified, Power Elektronik A.Ş. will reject all responsibility and the warranty will be void.
- Installation, maintenance and repairs shall only be performed only by trained and qualified personnel.
- Comply strictly with electrical safety regulations according to your country.
- Do not repair or manipulate the unit when energised.
- Use only Power Elektronik A.Ş. supplied spare parts.
- Only trained and qualified personnel shall have access to electrical parts inside the device.
- Check the installation annually by a qualified technician.
- Remove from service any item that has a fault and that can be dangerous for users (broken plugs, caps that don't close...).
- Do not use this product if the enclosure or the EV connector is broken, cracked, open, or shows any other indication of damage.
- Do not use any adaptors or conversion adapters, except those approved by the EV manufacturer.
- Cord extension sets are not allowed to be used.

AC Input Cable Configurations Table

Power	3,7kW	7,4kW	11kW	22kW
Ampere (A)	1x16A	1x32A	3x16A	3x32A
Cable Diameter (mm2)	3x4mm2	3x6mm2	5x4mm2	5x6mm2
Cable Type	1P+1N+1PE	1P+1N+1PE	3P+1N+1PE	3P+1N+1PE
Maximum EV Charger Cable Distance (m)	15m	12m	10m	7m

Features

- **Metal Case:** Resistant to possible impacts.
- **Mobile App:** Easy software interface for, user authentication, QR code starting, monitoring the Power consumption.
- **Connector:** Type 2 connector.
- **Led Indicator:** Led user interface for status of E-Finduk EV Charger.

Download “Elektron” App

A. Download the app “Elektron”.

B. Sign up

C. Log in

D. Scan the QR Code on the HMI unit.

E. You are charging with the E-Finduk EV Charger now.

How To Use E-Finduk

A. Standby

When the Led indicator is blue, it means that
E-Finduk is available and ready to start charging.

B. Plug Your EV

To Start a charging, connect the vehicle to the E-Finduk.
When the led indicator is yellow, it means that
E-Finduk is communicating with the vehicle.

C. Authorization

When you see the led indicator is yellow, now you can log in
the “Elektron” App and scan the QR code
or click the “Start Charging” button.

D. Start Charging

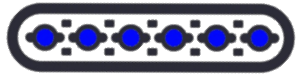
When you see the led indicator is green,
it means that the charging is started.

E. Stop Charging

If you want to stop charging before the EV fully charged,
you can use the “Elektron” App, clicking
the “Stop Charging” button. The led indicator will turn blue
“Standby”.

Led Indicator

Blue



Blue Lights indicates that
the charger is available

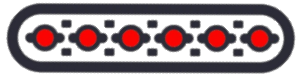
Yellow

Blue Lights indicates that
the charger is
communicating with EV

Green

Blue Lights indicates that
the charger is charging the EV

Red



Red Lights indicates that
an error is occurred.

General Data

Overview

- *Type-2 connector*
- *Multiscale power support (3,7 - 22 kW)*
- *User friendly*
- *Scalable*
- *Easy mounting*
- *Easy to use*
- *Remote monitoring and control*
- *Pedestal or wall mount*
- *OLED screen*
- *RFID card reader*
- *OCPP protocol*
- *Network connection via LAN*
- *GSM, WI-FI optional**
- *QR mobile use optional**

The Public Charger was designed to support Mode 3 charging (power ranging from 3,7 kW to 22 kW), able to charge any electric vehicle compatible with IEC 61851.

Using easy installation procedures and requirements, the Public Charger can be wall-mounted or pedestal-mounted, allowing versatile installation options.

The Human Machine Interface (HMI) with OLED display, LED status and RFID reader was designed for ease of use. Each Public Charger can be integrated in a charging infrastructure network and its operation and status is controlled by the central management system.

Technical Data
HOME&BUSINESS

Technicial Specifications

Station Charging Powe	22 kW
Voltage	Tree Phase 400 ± 10% AC
Lines	3 Phase | 1 Phase + Neutral + Earth
Current	32 A
Frequency	50/60 Hz
Overcurrent Protectio	40 A
AC Leakage Current Protectio	30 mA
DC Residual Current Protectio	|Δn DC ≥ 6 mA
Energy Meter	Available (< 0.1% Sensitivity)
Communication Protoco	OCPP
Communication w th Vehicle	Pilot Signal In Compliance With IEC 61851
Communication (WAN	Available (Default LAN, Optional: 3G, Wifi)
Number of Socket	1
Ingress Protection	IP54

Charge Mode	Available
RFID Card Reader	Mod 3 (EN/IEC 61851-1)
OLED Screen	Available (Mifare)
LED Notificati	Available (256 x 64,3.2 inch)
Operating Temperature Rang	Available
Mountin	-30 / +50 °C
Usage Area	Wall / Stand
Socket Input-Output Detectio	Indoor / Outdoor
Over Temperature/Humidity Detectio	Available
Low/High Voltage Detectio	Available
Power Failure Detection and N tifica n	Available
Remote Software Updat	Available
Remote Configuration Updat	Available
Error Logger	Available
Socket Type	IEC 62196 Type 2

Technical Data
BUSINESS DUO

Datasheet	Model	BUSINESS DUO 2x11kW	BUSINESS DUO 2x22kW
Input	Power Supply	3P+N+PE	3P+N+PE
	Rated Voltage	400V AC	400V AC
	Rated Current	32A	64A
	Frequency	50/60Hz	50/60Hz
Output	Output Voltage	400V AC	400V AC
	Maximum Current	3x16A	3x32A
	Rated Power	2x1 1kW	2x2 2kW
User Interface	Charge Connector	Type 2 socket	
	Enclosure	Galvanized steel	
	Left/Right Panel	Temper glass	
	LED Indicator	Green/Yellow/Red	
	LCD Display	2.7'' black & white screen	
	RFID Reader	Mifare ISO/IEC 14443 A	
	Start Mode	Plug&Play/RFID card/App	
	Emergency Stop	No	
Communication	Wi-Fi	Yes	
	Ethernet	Yes	
	3G/4G	Yes	
	OCPP	OCPP 1.6 Json (OCPP 2.0 optional)	
Safety	Energy Meter	MID certified	
	RCD	30mA Type A + 6mA DC	
	Ingress Protection	IP54	
	Impact Protection	IK08	
	Electrical Protection	Over current protection, Residual current protection, Short circuit protection, Ground protection, Surge protection, Over/Under voltage protection, Over/Under frequency protection, Over/Under temperature protection	
	Certification	CE	
	Certification Standard	EN/IEC 61851-1: 2017, EN/IEC 61851-21-2: 2018	
	Warranty	2 years	
Environment	Installation	Floor-stand	
	Work Temperature	-30℃~+50℃	
	Work Humidity	5%~95%	
	Work Altitude	<2000m	
Package	Product Dimension	1200*290*230mm (H*W*D)	
	Package Dimension	1320*480*430mm (L*W*H)	
	Net Weight	25.5kg	
	Gross Weight	45kg	
	External Package	Wood case	

Need Help ?

If you need help in case of any query or further information, please contact our Technical Support Department.

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