

COMMERCIELE &amp; INDUSTRIËLE LAADOPLOSSING • 7.4 / 11 / 22 KW AC

# Wallbox NEX

Slimme zakelijke en industriële AC-laadoplossing met MID Klasse B energiemeter, OLED-display en hybride dynamisch laadbeheer.



● Space Grey ○ Lunar Light • IP55 / IK10 • UL94 5VA Polycarbonate (297 × 210 × 110 mm)

## 7.4 / 11 / 22 kW AC Vermogen

Ondersteunt TN / TT / IT netstelsels • Kabel (7.5m) of Type 2 Socket / Shutter

## MID Klasse B (±1% Nauwkeurig)

EN 50470-3 gecertificeerde energiemeting, OLED-display & dubbele LED-strips

## RJ45×2 Daisy Chain, Wi-Fi & 4G

Bluetooth (BLE), Nano SIM + eSIM (Lifetime Connectivity Key) & OCPP 1.6J

## Hybride Dynamic Load Management

LoRa 868MHz, RS-485 Modbus RTU, Modbus TCP, Solar SC Kit & HDLM 100/400/600A

• The Charge Grid • Commercial & Industrial Smart AC Charging

CE • UKCA • MID Class B • OCPP 1.6J

## Wallbox NEX

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Tot 22 kW AC (TN/TT/IT)

MID Klasse B ( $\pm 1\%$   
Nauwkeurigheid)

RJ45x2 Daisy Chain, Wi-Fi &amp; 4G

LoRa 868MHz & Modbus  
TCP/RTU

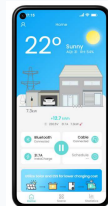
## ALGEMEEN (GENERAL)

|                             |                                                                                                 |
|-----------------------------|-------------------------------------------------------------------------------------------------|
| Charging connector          | IEC 62196 Type 2 cable 7.5m, Type 2 socket, Type 2 socket with shutter                          |
| Authentication methods      | Plug & Charge, RFID, The Charge Grid App via BLE, OCPP Backend                                  |
| HMI & indication            | Dual LED stripes                                                                                |
| Display                     | OLED display with status indicator and metering information                                     |
| Nominal output voltage      | Single phase: 230VAC $\pm 20\%$ , Three phase: 230/400VAC $\pm 20\%$                            |
| Maximum output power        | Single phase up to 7.4kW / Three phase up to 22kW with downgrade compatibility                  |
| Earthing system             | TN/TT/IT                                                                                        |
| Protection                  | UVP, OVP, OCP, Relay Stuck, Over Temperature                                                    |
| Residual current protection | At least Type A RCD upstream + Integrated 6mA DC per IEC 62955                                  |
| Nominal frequency           | 50/60Hz                                                                                         |
| Metering accuracy           | MID Certified Class B ( $\pm 1\%$ Accuracy), Electrical Pulse output: 1000 imp/kWh, 0.25-5(32)A |



## Smart Solar, Dynamic Load Balancing &amp; App Control

Seamless integration with CT clamps, SC Kit, and HDLM Kits (RS-485 / Wireless LoRa) for multi-charger dynamic load balancing, solar surplus charging, and real-time mobile app management.



**CONNECTIVITEIT (CONNECTIVITY)**

|                             |                                                                                                                                       |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| Vehicle communication       | Mode 3 in accordance with IEC 61851-1 ed. 3 (2017)                                                                                    |
| RFID authentication         | ISO/IEC 14443A/B, 13.56 MHz, Maximum length: 7 bytes                                                                                  |
| Connectivity to backend     | Ethernet: RJ45*2, Daisy Chain • Wi-Fi: 2.4GHz, 802.11 b/g/n • 4G: LTE CAT 1, LTE-FDD: B1/3/5/7/8/20/28                                |
| Backend protocol            | OCPP 1.6 (JSON) 2nd edition                                                                                                           |
| Connectivity to EMS/Meter   | Modbus TCP via LAN, WLAN • Modbus RTU via RS-485 • LoRa 868MHz                                                                        |
| Connectivity to smart phone | Bluetooth (BLE)                                                                                                                       |
| SIM card                    | Two SIM options: User SIM (Nano SIM, Settable APN user name and password) • eSIM (Integrated, activated by Lifetime Connectivity Key) |

**LAADBEHEER & HYBRIDE DYNAMIC LOAD MANAGEMENT**

|                                 |                                                                                                                     |
|---------------------------------|---------------------------------------------------------------------------------------------------------------------|
| CT Clamp Dynamic Load Balancing | Direct connection to CT Clamp for Dynamic Load Balancing                                                            |
| Solar & SC Kit Integration      | Connect to SC Kit for Dynamic Load Balancing and Solar Charging (Solar Only / Solar Smart)                          |
| External EMS Integration        | Connect to external EMS as Modbus RTU secondary via RS-485 or Modbus TCP via LAN/WLAN                               |
| OCPP Backend Load Management    | OCPP 1.6J smart charging profiles via The Charge Grid Backend                                                       |
| Static Load Management          | Static load management setting in The Charge Grid App and Install App                                               |
| Hybrid Dynamic Load Management  | Connect to HDLM Kit (100A / 400A / 600A) via RS-485 or Wireless LoRa 868MHz                                         |
| Leader / Follow Architecture    | Connection between Leader Charger and Follow Charger via Wireless LoRa for Multiple Chargers Dynamic Load Balancing |

**BEDRIJFSOMSTANDIGHEDEN (OPERATING CONDITIONS)**

|                                   |                                                                                  |
|-----------------------------------|----------------------------------------------------------------------------------|
| Operating temperature             | -30 ~ 55°C with derating mechanism                                               |
| IK protection (mechanical impact) | IK10                                                                             |
| Relative humidity                 | 5% ~ 95%                                                                         |
| Operating altitude                | 3000m                                                                            |
| Electrical safety class           | Class I                                                                          |
| Standby power                     | 4.5W                                                                             |
| Degree of protection (housing)    | Charging core: IP55 • Between charging core and backplate: IP54 • EtherBox: IP67 |
| Environmental & EMC conditions    | Indoor / outdoor use • Class B residential according to IEC 61851-21-2           |

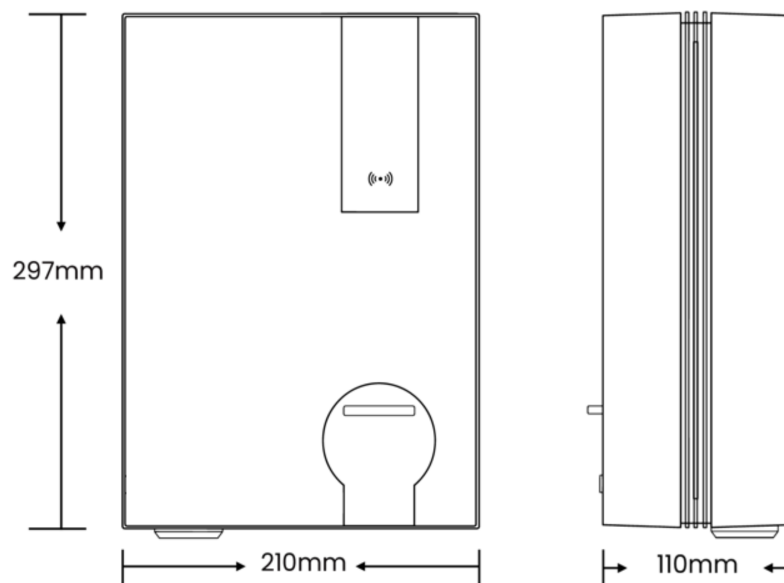
## CONFORMITEIT &amp; CERTIFICERING (COMPLIANCE)

|             |                                                                                                                                                     |
|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| Certificate | CE, UKCA                                                                                                                                            |
| Safety      | EN 61851-1, EN 62955, EN 62196, EN 61439                                                                                                            |
| EMC         | EN 61851-21-2:2021, EN 301489-1 V2.2.3:2019, EN 301489-3 V2.3.2:2023, EN 301489-17 V3.2.5:2022, EN 301489-52 V1.2.1:2021                            |
| RED         | EN 300328 V2.2.2:2019, EN 300330 V2.1.1:2017, EN 301908-1 V15.1.1:2021, EN 301908-13 V13.2.1:2022, EN 300220-1 V3.1.1:2017, EN 300220-2 V3.1.1:2017 |
| MID         | EN 50470-3, EN 62053-23                                                                                                                             |
| Health      | EN 62311:2008, EN 50663:2017, EN 61000-6-2:2016, EN 61000-6-3:2006                                                                                  |
| RoHS        | Directive 2011/65/EU & (EU)2015/863 Annex II                                                                                                        |
| UKCA        | UK Smart Charging Legislation, BS 7671:2018+A2:2022                                                                                                 |

## MECHANISCHE SPECIFICATIES (MECHANICAL)

|                                  |                                                                         |
|----------------------------------|-------------------------------------------------------------------------|
| Mounting options                 | Wall mounted, Pedestal                                                  |
| Material                         | Polycarbonate, UV resistant and flame retardant, UL94 5VA               |
| Casing (exterior) dimensions     | 297 x 210 x 110 mm (H x W x D) (297x210x110)                            |
| Packaging dimensions (H x W x D) | 450 x 360 x 230 mm (socket variant), 490 x 650 x 230 mm (cable variant) |
| Weight                           | 4.7 - 8.5 kg                                                            |

## AFMETINGEN &amp; TECHNISCHE TEKENING (297X210X110 MM)



## COMPATIBELE ACCESSOIRES (ACCESSORIES)


**HDLM Kit (100 / 400 / 600)**

HDLM Kit for NEX & Gemini • 3P Meter Unit, 3 CT Clamps (100A 1:5000 / 400A 1:4000 / 600A 1:6000)

92.6 × 72 × 71.5 mm (Energy Meter)


**SC Kit (Solar & DLB Kit)**

Solar Charging & Dynamic Load Balancing kit for NEX • 3P Meter Unit, 3 CT Clamps, 80A, 1:3000

Direct RS-485 & Solar Surplus Control


**Pedestal Model 1**

For charging station mounting • Double-sided installation, cable hook • Material: Aluminium Alloy, Black

Dimension (H×W×D): 1,435.5 × 260 × 200 mm


**Pedestal Model 2**

Pedestal for 2×NEX back-to-back installation • Protection cabinet with DIN rail • Aluminium Alloy, Black

Dimension (H×W×D): 1,407 × 350 × 230 mm


**Charging Cable**

T2 to T2, 5m / 7.5m, 1-phase up to 32A (7kW) & 3-phase up to 32A (22kW)

Supplied with protective carry bag


**RFID Card**

The Charge Grid RFID Card, Business Pack (20 Cards) • ISO/IEC 14443A/B 13.56 MHz

Instant fleet & employee authentication


**Wall Bracket**

Safe and secure installation on uneven surfaces • Material: SPCC • Weight: 0.82 kg

Dimension (H×W×D): 338 × 205 × 11.5 mm


**3P Smart Energy Meter**

DIN-rail 3-Phase Energy Meter & CT set for commercial sub-distribution boards

RS-485 Modbus RTU / LoRa 868MHz