COMMERCIAL & INDUSTRIAL CHARGING SOLUTION • 7.4 / 11 / 22 KW AC

Wallbox NEX

Smart commercial and industrial AC charging solution with MID Certified Class B metering, OLED display, and hybrid dynamic load management.

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

7.4 / 11 / 22 kW AC Output

Supports TN / TT / IT earthing systems • Type 2 cable (7.5m) or Socket / Shutter

MID Class B (±1% Accuracy)

EN 50470-3 certified billing meter, OLED display & dual RGB LED stripes

RJ45×2 Daisy Chain, Wi-Fi & 4G

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

Hybrid 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

COMMERCIAL & INDUSTRIAL CHARGING SOLUTION • 7.4 / 11 / 22 KW AC

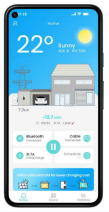
- Up to 22 kW AC (TN/TT/IT)
- MID Class B (±1% Accuracy)
- RJ45×2 Daisy Chain, Wi-Fi & 4G
- LoRa 868MHz & Modbus TCP/RTU

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 ± 20%, Three phase: 230/400VAC ± 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 (±1% Accuracy), Electrical Pulse output: 1000 imp/kWh, 0.25-5(32)A

Smart Solar, Dynamic Load Balancing & 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.



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)

LOAD MANAGEMENT & HYBRID 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

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

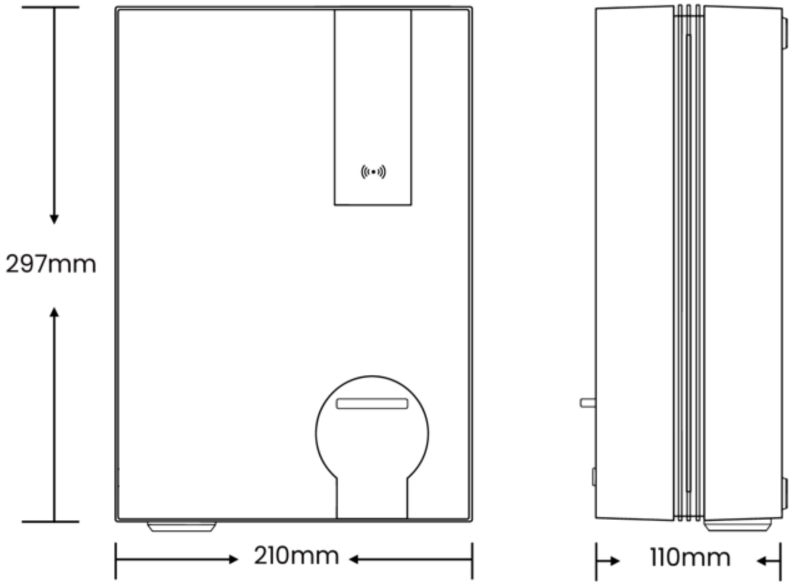
COMPLIANCE

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

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

DIMENSIONS & TECHNICAL DRAWING (297X210X110 MM)



COMPATIBLE 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

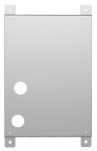
T2 to T2, 5m / 7.5m, 1-phase up to 32A (7kW) & 3-phase up to 32A (22kW)

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