

### **NB Wall**

USER-FRIENDLY INTERFACE
SMART FLEET MANAGEMENT
DYNAMIC POWER CONTROL
BACK-OFFICE INTEGRATION OCPP 1.6

### THE BEST SOLUTION FOR HOME AND CAR PARKS

NB Wall is a robust and attractive outdoor AC charging system, making it ideal for car parks and smart homes. It has been designed with durability, reliability and ease of use in mind. With output power of 2 x 22 kW (2 x 7.7 kW in US), NB Wall is compatible with AC Type 1 and 2 connectors. Its smart design offers a simple, fast and easy charging experience, which makes NB Wall the best AC charging solution for applications that require maximum integration with the most advanced functionalities.

## MULTIPLE CONNECTION OPTIONS

NB Wall has been designed to offer the most flexible charging solution to be installed in car parks and smart homes.

With up to  $2 \times 22$  kW ( $2 \times 7.7$  kW in US) NB Wall is compatible with Type 1 and 2 AC connectors with outlet socket options or versions with straight and spiral cables.





**AC Type 1** 

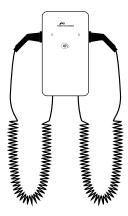
AC Type 2

#### **OUTLET SOCKET VERSION**

Type 1 or Type 2



2 x Type 1 or 2 x Type 2



#### HARD-WIRED VERSION

Type 2



2 x Type 2



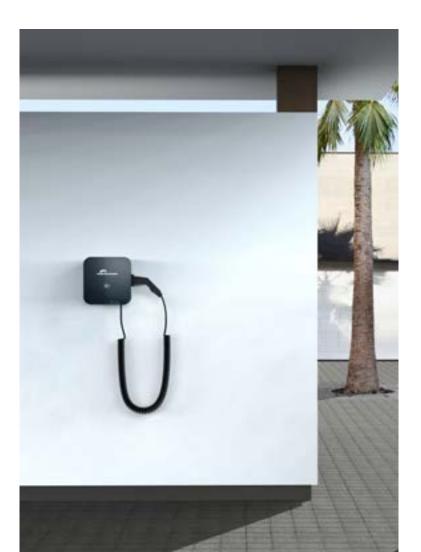
## USER-FRIENDLY INTERFACE

#### Intuitive experience

NB Wall has a smartphone app to facilitate the interaction with the user. Power Electronics chargers integrate a state indicator so that the drivers can easily identify its availability.

#### Payment and authentication system

Every charger is compatible with the most extended payment and authentication systems, offering the most useful solutions in the market for an easy interaction with the customer.





#### **Bluetooth**

Presence recognition through bluetooth connectivity.



#### RFID

Drivers can launch a charging session by tapping their RFID card.



#### Credit / debit card

Compatibility with contact-less (NFC) solutions, letting drivers initiate the charging process by simply tapping their credit / debit card.



#### **Smartphone**

Power Electronics' NB Charger smartphone application allows monitoring and the scheduling charging sessions, consult statistics and historical, update the software version, define users' roles and manage the charging energy.

### ENERGY MANAGEMENT

Power Electronics has developed the most advanced functionalities for power balancing in vehicle fleet management. Designed to minimize the initial investment and operation costs.

#### **Smart Fleet Management**

This functionality is able to balance the power based on the number of charging posts in use. Therefore, the total power required to supply the total energy gets substantially reduced, representing a cost reduction in the electrical facility infrastructure and a cost saving due to a minor power contracted.

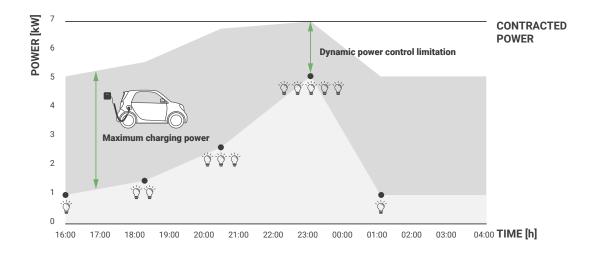
#### **Dual Power Sharing**

It allows to share the available power between the two charging points of the equipment so as not to exceed a fixed or dynamic limitation. This represents significant savings due to a lower contracted power.



#### **Dynamic Power Control**

This optional device ensures dynamic adaptation of the power being used to charge the vehicle in accordance with the energy being consumed by other electrical loads in the facitlity, without having to increase contractual power capacity.



# SMART AND CUSTOMIZABLE DESIGN

#### **Customizable external enclosures**

Power Electronics offers customizable external enclosures. The colour can be changed or logos and advertising can be added.



NB WALL IEC

| BASIC                                                  | ADVANCED                         | PROFESSIONAL                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |
|--------------------------------------------------------|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 400 (3ph + N +PE)                                      |                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |
| 22.2                                                   |                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |
|                                                        | Internal energy measurement      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |
| -                                                      | -                                | MID meter                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
| Smart Fleet Management                                 |                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |
| Wifi                                                   |                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |
| -                                                      | -                                | 3G / 4G connectivity                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |
|                                                        | Ethernet                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |
| OCPP 1.6                                               |                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |
| Bluetooth                                              |                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |
| RFID card reader                                       |                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |
| -                                                      | RCD Type A                       | RCD Type A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |
| -                                                      | MCB                              | MCB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |
| -                                                      | RCM                              | RCM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |
| IP54 / IK10 (IK08 for display and ventilation grilles) |                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |
| White colour (RAL 9016 - microtexture painting)        |                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |
|                                                        | C4 anti-corrosion protection [1] |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |
| Black                                                  |                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |
| From -25°C to 50°C                                     |                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |
| 4% - 95%                                               |                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |
| NB Charger App - Status indicator                      |                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |
| Frame 1: 310 x 200 x 310<br>Frame 2: 310 x 200 x 750   |                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |
| Frame 1: Bottom input                                  |                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |
|                                                        |                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |
| IEC 61851-1, IEC 61000-6-2, IEC 61000-6-3              |                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |
|                                                        | -<br>-<br>-<br>-<br>-<br>IP54,   | 400 (3ph + N +PE)  22.2  Internal energy measurement  -  Smart Fleet Management  Wifi  -  Ethernet  OCPP 1.6  Bluetooth  RFID card reader  -  RCD Type A  MCB  -  MCB  RCM  IP54 / IK10 (IK08 for display and ventilation of the colour (RAL 9016 - microtexture pain C4 anti-corrosion protection III)  Black  From -25°C to 50°C  4% - 95%  NB Charger App - Status indicator  Frame 1: 310 x 200 x 310  Frame 2: 310 x 200 x 750  Frame 1: Bottom input  Frame 2: Bottom and rear input |  |

STANDARD MODELS IEC

| MODEL   | MODEL        | REFERENCE | TYPE OF CONNECTOR                 |
|---------|--------------|-----------|-----------------------------------|
| FRAME 1 | BASIC        | NBWHB41   | 1 x AC Type 2 (Plug - 4 m spiral) |
|         |              | NBWHB42   | 1 x AC Type 2 (Socket)            |
|         | ADVANCED     | NBWHA41   | 1 x AC Type 2 (Plug - 4 m spiral) |
|         |              | NBWHA42   | 1 x AC Type 2 (Socket)            |
|         | PROFESSIONAL | NBWHP41   | 1 x AC Type 2 (Plug - 4 m spiral) |
|         |              | NBWHP42   | 1 x AC Type 2 (Socket)            |
| FRAME 2 | BASIC        | NBWHB46   | 2 x AC Type 2 (Plug - 4 m spiral) |
|         |              | NBWHB47   | 2 x AC Type 2 (Socket)            |
|         | ADVANCED     | NBWHA46   | 2 x AC Type 2 (Plug - 4 m spiral) |
|         |              | NBWHA47   | 2 x AC Type 2 (Socket)            |
|         | PROFESSIONAL | NBWHP46   | 2 x AC Type 2 (Plug - 4 m spiral) |
|         |              | NBWHP47   | 2 x AC Type 2 (Socket)            |

#### **AVAILABLE OPTIONS**

| CABLE LENGTH      | 5 m cable (straight)            |  |
|-------------------|---------------------------------|--|
| ENERGY MANAGEMENT | Dynamic Power Control (< 65 A)  |  |
|                   | Dynamic Power Control (< 300 A) |  |

NB WALL US

| Model                                   | BASIC                                                      | ADVANCED                         | PROFESSIONAL         |
|-----------------------------------------|------------------------------------------------------------|----------------------------------|----------------------|
| AC voltage input [V]                    | 208 / 240 (L1, L2, PE)                                     |                                  |                      |
| Maximum output power per connector [kW] |                                                            | 6.7 / 7.7                        |                      |
| Energy measurement                      | Internal energy measurement                                |                                  |                      |
|                                         | -                                                          | -                                | Revenue meter        |
| Energy management                       | Smart Fleet Management                                     |                                  |                      |
| Communications                          | Wifi                                                       |                                  |                      |
| _                                       | -                                                          | -                                | 3G / 4G connectivity |
|                                         | Ethernet                                                   |                                  |                      |
|                                         | OCPP 1.6                                                   |                                  |                      |
| Authentication                          | Bluetooth                                                  |                                  |                      |
|                                         | RFID card reader                                           |                                  |                      |
| Protections                             | -                                                          | CCID                             | CCID                 |
|                                         | -                                                          | MCB                              | MCB                  |
| External enclosure                      | NEMA 3R                                                    |                                  |                      |
|                                         | White colour (RAL 9016 - microtexture painting)            |                                  |                      |
|                                         |                                                            | C4 anti-corrosion protection [1] |                      |
| Glass colour                            | Black                                                      |                                  |                      |
| Operating temperature                   | From -13°F to 122°F                                        |                                  |                      |
| Relative humidity                       | 4% - 95%                                                   |                                  |                      |
| Interface                               | NB Charger App - Status indicator                          |                                  |                      |
| Dimensions (W x D x H) [ft]             | Frame 1: 1.01 x 0.65 x 1.01<br>Frame 2: 1.01 x 0.65 x 2.46 |                                  |                      |
| Cable input                             | Frame 1: Bottom input<br>Frame 2: Bottom and rear input    |                                  |                      |
| Regulation                              | UL 2594, FCC Part 15 Class B, NEC 625                      |                                  |                      |

STANDARD MODELS US

| FRAME   | MODEL        | REFERENCE | TYPE OF CONNECTOR                     |
|---------|--------------|-----------|---------------------------------------|
| Frame 1 | BASIC        | NBWUB23   | 1 x AC Type 1 (Plug - 13.1 ft spiral) |
|         | ADVANCED     | NBWUA23   | 1 x AC Type 1 (Plug - 13.1 ft spiral) |
|         | PROFESSIONAL | NBWUP23   | 1 x AC Type 1 (Plug - 13.1 ft spiral) |
| Frame 2 | BASIC        | NBWUB28   | 2 x AC Type 1 (Plug - 13.1 ft spiral) |
|         | ADVANCED     | NBWUA28   | 2 x AC Type 1 (Plug - 13.1 ft spiral) |
|         | PROFESSIONAL | NBWUP28   | 2 x AC Type 1 (Plug - 13.1 ft spiral) |

#### AVAILABLE OPTIONS

| CABLE LENGTH      | 18 ft cable (straight)          |
|-------------------|---------------------------------|
| ENERGY MANAGEMENT | Dynamic Power Control (< 300 A) |