



# NB City

USER-FRIENDLY INTERFACE

SMART FLEET MANAGEMENT

DYNAMIC POWER CONTROL

BACK-OFFICE INTEGRATION OCPP 1.6

## THE BEST SOLUTION FOR SMART CITIES

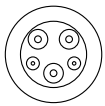
NB City is a robust and attractive outdoor AC charging system, making it ideal for “smart” cities. It has been designed with durability, reliability and ease of maintenance in mind. With output power of 2 x 22 kW (2 x 7.7 kW in US), NB City is compatible with AC Type 1 and 2 connectors.

Its smart design offers a simple, fast and easy charging experience, which makes NB City the best AC charging solution for applications that require maximum urban integration with the most advanced functionalities.

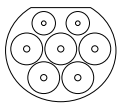
# MULTIPLE CONNECTION OPTIONS

**NB City has been designed to offer the most flexible charging solution to be installed in smart cities.**

NB City 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**

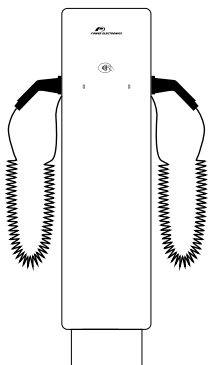
## OUTLET SOCKET VERSION

**2 x Type 2**



## HARD-WIRED VERSION

**2 x Type 1 or 2 x Type 2**



# USER-FRIENDLY INTERFACE

## Intuitive experience

NB City has a smartphone app to facilitate the interaction with the user. Optionally, it can install a display that allows the visualization of the charging process. Power Electronics chargers integrate a state indicator so that the drivers can easily identify its availability.

## Payment and authentication system

Every charging post 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

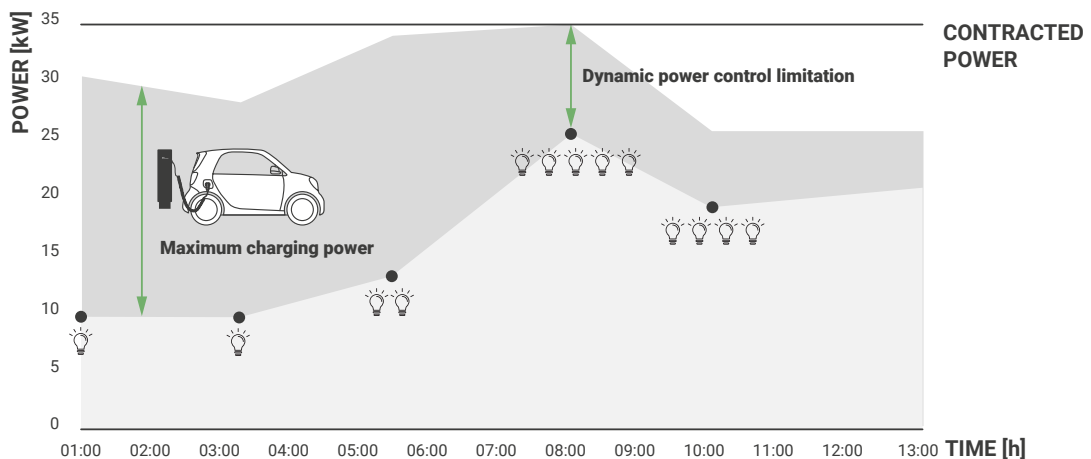
It allows to share the available power between the two charging points of the equipment so as not to exceed a fixed or dynamic limitation. This represents significant savings due to a lower contracted power.



### 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 facility, 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. Optionally, a panel for advertising can be included on the back of the charger.



## NB CITY

IEC

Model	ADVANCED	PROFESSIONAL
AC input [V]	400 (3ph + N +PE)	
Maximum output power per connector [kW]	22.2	
Energy measurement	Internal energy measurement	
	-	MID meter
Energy management	Smart Fleet Management	
Communications	Wifi	
	-	3G/4G connectivity <sup>[1]</sup>
	Ethernet	
	OCPP 1.6	
Authentication	Bluetooth	
	RFID card reader	
Protections	RCD Type A	
	MCB	
	-	RCM
External enclosure	IP54 / IK10 (IK08 for display and ventilation grilles)	
	White colour (RAL 9016 - microtexture painting)	
	C4 anti-corrosion protection <sup>[2]</sup>	
Glass colour	Black	
Operating temperature	From -25°C to 50°C	
Relative humidity	4% - 95%	
Interface	NB Charger App - Status indicator - Time schedule	
Dimensions (W x D x H) [mm]	350 x 190 x 1300	
Regulation	IEC 61851-1, IEC 61000-6-2, IEC 61000-6-3	

## STANDARD MODELS

MODEL	REFERENCE	TYPE OF CONNECTOR
ADVANCED	NBCHA46	2 x AC Type 2 (Plug - 3 m)
	NBCHA47	2 x AC Type 2 (Socket)
PROFESSIONAL	NBCHP46	2 x AC Type 2 (Plug - 3 m)
	NBCHP47	2 x AC Type 2 (Socket)

[1] Possibility of double SIM with redundancy functionality.

[2] C3 anti-corrosion protection for stainless steel enclosure.

**AVAILABLE OPTIONS****IEC**

<b>ENCLOSURE</b>	Customizable enclosure colour
	Customizable foot colour
	Customizable glass colour
	Stainless steel AISI 316L (2B)
	PE logo substitution
	Extra logo
<b>CONNECTION CONFIGURATION</b>	Advertising (back side)
	4 m cable (spiral)
	5 m cable (straight)
	Anti-vandalism system (socket outlet)
<b>PROTECTIONS</b>	Connector locker
	Surge arrester Type 2
	Surge arrester Type 1+2
<b>INTERFACE</b>	RCD Type A with automatic reset <sup>[1]</sup>
	Display <sup>[2]</sup>
<b>ENERGY MANAGEMENT</b>	Dynamic Power Control (< 65 A)
	Dynamic Power Control (< 100 A)

[1] Optional for Professional models.

[2] Available for indoor installations or under a cover that protects it from direct solar radiation.



## NB CITY

US

<b>Reference</b>	NBCUA28
<b>AC input [V]</b>	208 / 240 (L1, L2, PE)
<b>Maximum output power per connector [kW]</b>	6.7 o 7.7
<b>Connector</b>	2 x AC Type 1 (12 ft)
<b>Energy measurement</b>	Internal energy measurement
<b>Energy management</b>	Smart Fleet Management
<b>Communications</b>	Wifi
	3G/4G connectivity <sup>[1]</sup>
	Ethernet
	OCPP 1.6
<b>Authentication</b>	Bluetooth
	RFID card reader
<b>Protections</b>	CCID
	MCB
<b>External enclosure</b>	NEMA 3R
	White colour (RAL 9016 - microtexture painting)
	C4 anti-corrosion protection <sup>[2]</sup>
<b>Glass colour</b>	Black
<b>Operating temperature</b>	From -13°F to 122°F
<b>Relative humidity</b>	4% - 95%
<b>Interface</b>	NB Charger App - Status indicator - Time schedule
<b>Dimensions (W x D x H) [ft]</b>	1.15 x 0.62 x 4.27
<b>Regulation</b>	UL 2594, FCC Part 15 Class B, NEC 625

[1] Possibility of double SIM with redundancy functionality.

[2] C3 anti-corrosion protection for stainless steel enclosure.

**AVAILABLE OPTIONS****US**

<b>ENCLOSURE</b>	Customizable enclosure colour
	Customizable foot colour
	Customizable glass colour
	Stainless steel AISI 316L (2B)
	PE logo substitution
	Extra logo
	Advertising (back side)
<b>CONNECTION CONFIGURATION</b>	13.1 ft cable (spiral)
	18 ft cable (straight)
	Connector locker
<b>PROTECTIONS</b>	Surge arrester Type 2
	Surge arrester Type 1+2
<b>INTERFACE</b>	Display <sup>[1]</sup>
<b>ENERGY MANAGEMENT</b>	Revenue meter
	Dynamic Power Control (< 65 A)
	Dynamic Power Control (< 100 A)

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[1] Available for indoor installations or under a cover that protects it from direct solar radiation.