

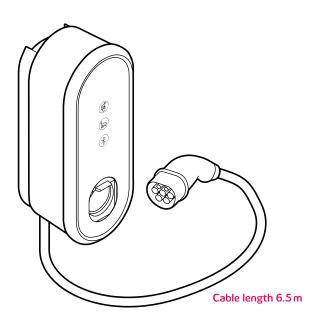




The eBox professional is a modern, leading-edge charging solution for electric vehicles. It can be used easily and quickly for charging up to 22 kW of power. It presents a large number of ports and authentication options. The eBoxes can be mounted in the eClick on a wall or pillar. The eBox professional is available in two versions: one with a Type 2 socket and one with a Type 2 plug and cable.



eBox professional with Type 2 socket



eBox professional with Type 2 plug and cable

Key features

- Charging up to 22 kW
- Charging status displayed by 3 LEDs and LED ring
- Simple commissioning via touch button and app
- Facilities for authenticating and paying for charging processes by app, RFID card, or ISO 15118 or smart cable
- LTE / 3G / 2G communication with eOperate or WLAN, LAN with eCharge+ app
- · Commissioning: simply clicking the eBox on the eClick and connect via Bluetooth with the smartphone

Certificates





eBox professional Data sheet



Charging power	3.7 / 4.6 / 7.4 / 11 / 13.8 / 22 kW (16 A, 20 A, 32 A; single- or three-phase)
Applications	Protected internal areas; unprotected exterior areas exposed to rain and direct sunlight
IP	IP 55
Operating temperature	-30 °C to +50 °C (full load output at -30 °C to +50 °C)
	Thermal overload protection: output power reduced at higher temperatures
Storage temperature	-30 °C to +80 °C
Air humidity	5% to 95% as defined under IEC 61851-1 Ed.3/EN 61851-1 (2017)
Max altitude above sea level	Max 2,000 m (air pressure: 860 hPa to 1,060 hPa)
UV protection	Outdoors (F1)
Housing material	Lexan® EXL9330 (copolymer)
Protection category	
(impact strength)	IK10 as defined under IEC 62262:2002
Weight	eBox socket version 3.1kg
(without eClick and eSmartMeter)	eBox cable version 6.4 kg
Number of charging ports	
	Socket version: Type 2 plug assembly as defined under DIN EN 62196-2
	with automatic plug locking, shutter
Plug assembly	Cable version: Type 2 plug as defined under DIN EN 62196-2
	Plug compartments on eBox, shutter
Cable length (version with cable)	6.5 m
-	eOperate using LG2WAN for business applications
Backend protocol	and eHome using OCPP 2.0 for residential application
	Three-phase current 400 V AC, 32 A (22 kW) / 20 A (13.8 kW) / 16 A (11 kW)
Input power from eClick	Alternating (single-phase) current 230 V AC, 32 A (7.4 kW) / 20 A (4.6 kW) / 16 A (3.7 kW)
Output power	Three-phase current 400 V AC, 32 A (22 kW) or 16 A (11 kW)
	Alternating (single-phase) current 230 V AC, 32 A (7.4 kW) or 16 A (3.7 kW)
IP	
Standby power	6 W
Charging mode	Mode 3 (IEC 61851)
Vehicle communication	Charging current controlled via PWM pilot signal (IEC 61851-1:2017)
Alternative vehicle communication	ISO 15118 ready via PLC
User protection: integrated	Integrated AC/DC sensitive GFCI, triggering at: DC 6 mA
Integrated overvoltage protection	according to IEC 61851-21-2:2018 (ESD/surge/burst)
Indication signal for welded power	Connection via change-over contact (max. 230 V, 1A),
contacts (Welding Detection)	use e.g. for shunt release for disconnection of main power path
Display / interaction	LED ring for charging status;
	2 status LEDs: authentication / RFID, vehicle link;
	1 status LED as touch button: Bluetooth
Measured consumption	Current and voltage measured by eBox, power and energy provided with 99.9% accuracy
	Additionally optional eSmartMeter for calibrated measurement (100% accuracy) available for eClick
Direct communication	Bluetooth Class 1 and 2 (power level)
	eHome (eCharge+ app): WLAN with 2,4 GHz b/g/n with WPA2 (aerial gain, frequency-dependent,
Backend link	max 4.6 dBi) or LAN or eOperate: SIM-card (frequency- and direction-dependent, max 4.4 dBi aerial gain)



eBox professional

Data sheet



General and electrical specifications	eBox professional
Authentication / activation	Free charging, eCharge+ app (smartphone app for $iOS^{\otimes}/Android^{TM}$) from contracted providers or
	Direct Payment (credit card / PayPal), Direct Payment via web access
Plug&Charge (eCable smart)	Yes
Plug&Charge (ISO 15118)	Yes
RFID authentication	Yes, protocols: MIFARE Classic (card and chip) as defined under ISO 14443A, Type V (ISO/IEC 15693/Vicinity)
Charging port number	Charge port number lasered on shutter
Certifications	CE certificate (tested and confirmed by a certified body)
Information for use	Schematics for use are included with the product and may be affixed by the customer to the eBox
Branding	Large area for customer branding
Packaging dimensions (W x D x H)	515 mm x 225 mm x 235 mm (socket version)/
	$695\mathrm{mm}\mathrm{x}370\mathrm{mm}\mathrm{x}235\mathrm{mm}$ (cable version)

External accessories	eBox professional
User protection installed in sub-distribution	Type A RCD:
	32 A connection: ABB F204A-40/0.03, Type A, 4-pin (short time delay operating voltage: 230/400 V AC)
	16 A connection: ABB F204A-25/0.03, Type A, 4-pin (short time delay operating voltage: 230/400 V AC)
Short circuit / overload protection installed in sub-distribution	Circuit breaker:
	32 A connection: ABB S203-NA K40A (rated switching capacity: 6,000 A)
	16 A connection: ABB S203-NA K20A (rated switching capacity: 6,000 A)

The wall-mounted eBox professional is available as the following variants: eBox professional, Type 2 socket eBox professional, Type 2 plug with cable each including eClick

The eBox professional is not branded and has a neutral colour. On request, the eBox may be ordered with the innogy branding or customized branding, please consult your sales office. Additional accessories, e.g. the eSmartMeter, may be included in the order.

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