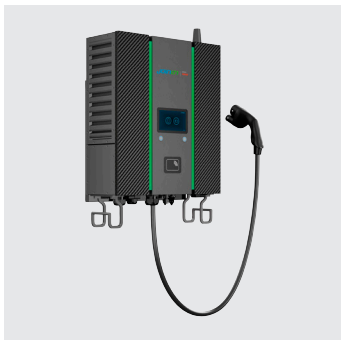# I-FAST

JOINON's solution for fast charging

I-FAST is the range of **DC charging stations from 30 kW to 180 kW** that allow reducing charging times and optimizing stops. Thanks to their high reliability and robustness, as well as their refined design, I-FAST stations are perfect for both urban and suburban contexts. They represent the ideal solution for charging any type of electric vehicle in high-turnover parking lots (both private and public), highways, expressways and service areas.
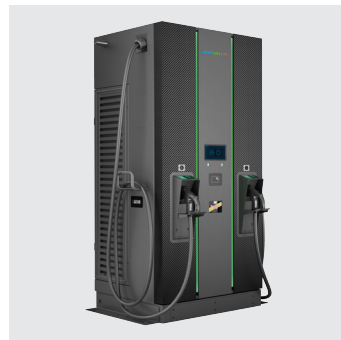
DC charging stations

(I-FAST Wallbox)

The Wallbox version is the smart investment for e-Mobility, as it offers fast charging **up to 30 kW** in an ultra-compact casing. Suitable for wall or floor installation.

(I-FAST Compact Station)

The "all-in-one" solution for direct current charging **up to 60 kW** is designed for fast and convenient charging in a compact casing. Suitable for floor installation.

(I-FAST Station)

The Station versions of the I-FAST range are modular and scalable units, available in 4 different power sizes: **90 kW, 120 kW, 150 kW** or **180 kW**. Suitable for floor installation.

(Accessories)

- 30KW AC-DC additional power conversion modules.
- Supports for management of charging cables.
- Supports for floor installation.
- Fixing plates for concrete floors.

JOINON | powered by GEWISS

I-FAST Wallbox

Electrical specifications

AC Input	Input voltage	3P 380 ÷ 415 Vac (±15 %)
	AC input connection	3P+N+PE (Wye configuration), TN/TT
	Max. input current	3P 40 A
	Frequency	50 Hz / 60 Hz
	Power factor	> 0.99
	Efficiency	> 94 % (to optimize point V/I)
DC Output	Output voltage range	CCS2: 150 ÷ 950 Vdc CHAdeMO: 150 ÷ 500 Vdc
	Max. output current	CCS2: 80 A @500 Vdc CHAdeMO: 60 A @500 Vdc
	Max. output power	30 kW
	Voltage/current accuracy	±2 %

Mechanical specifications

Dimensions (LxHxD)	610 x 690 x 230 mm ±1%
Weight	≤ 80 kg ±1 % / 2 connectors: ≤ 88 kg ±1 %
Cable length	4 m (optional 7 m)

Protections

Input protections	OVP, OPP, OTP, UVP, SPD
Output protections	SCP, OCP, OVP, LVP, OTP, IMD

Regulation

Safety	CE, CB
Certificates	IEC 61851-1, IEC 61851-23, IEC 61851-21-2
Charging interfaces	DIN 70121, ISO 15118-2, CHAdeMO V1.2

I-FAST Station

Electrical specifications

AC Input	Input voltage	3P 380 ÷ 415 Vac (±15 %)
	AC input connection	3P+N+PE (Wye configuration), TN/TT
	Max. input current	3P 130 ÷ 260 A
	Frequency	50 Hz / 60 Hz
	Power factor	> 0.99
	Efficiency	> 94 % (to optimize point V/I)
DC Output	Output voltage range	CCS2: 150 ÷ 950 Vdc CHAdeMO: 150 ÷ 500 Vdc / GBT: 150 ÷ 750 Vdc
	Max. output current	CCS2: 250 A (peak 350 A) (optional CCS2: 300 A or CHAdeMO / GBT: 120 A)
	Max. output power	90 ÷ 180 kW
	Voltage/current accuracy	±2 %

Mechanical specifications

Dimensions (LxHxD)	800 x 1.900 x 650 mm ±1%
Weight	≤ 390 ÷ 500 kg ±1 %
Cable length	4.5 m (optional 7 m)

Protections

Input protections	OVP, OPP, OTP, UVP, SPD
Output protections	SCP, OCP, OVP, LVP, OTP, IMD

Regulation

Safety	CE, CB
Certificates	IEC 61851-1, IEC 61851-23, IEC 61851-21-2
Charging interfaces	DIN 70121, ISO 15118-2, CHAdeMO V1.2

I-FAST Compact Station

Electrical specifications

AC Input	Input voltage	3P 380 ÷ 415 Vac (±15 %)
	AC input connection	3P+N+PE (Wye configuration), TN/TT
	Max. input current	3P 86 A
	Frequency	50 Hz / 60 Hz
	Power factor	> 0.99
	Efficiency	> 94 % (to optimize point V/I)
DC Output	Output voltage range	CCS2: 150 ÷ 950 Vdc CHAdeMO: 150 ÷ 500 Vdc / GBT 150 ÷ 750 Vdc
	Max. output current	CCS2: 150 A (optional CHAdeMO / GBT: 120 A)
	Max. output power	60 kW
	Voltage/current accuracy	±2 %

Mechanical specifications

Dimensions (LxHxD)	700 x 1.800 x 330 mm ±1%
Weight	≤ 235 kg ±1 %
Cable length	4 m (optional 7 m)

Protections

Input protections	OVP, OPP, OTP, UVP, SPD
Output protections	SCP, OCP, OVP, LVP, OTP, IMD

Regulations

Safety	CE, CB
Certificates	IEC 61851-1, IEC 61851-23, IEC 61851-21-2
Charging interfaces	DIN 70121, ISO 15118-2, CHAdeMO V1.2

For all I-FAST models

User interface and control

Display	7" TFT-LCD
Controls	Operation buttons / Emergency stop button
User authentication	RFID: Support ISO 14443A/B, ISO 15693, FeliCa Lite-S (RCS966), OCPP 1.6 JSON, QR Code, App, Payment system (optional)
Energy meter	AC MID Meter (optional) / DC PTB Meter (optional)

Communication

External	Ethernet, WiFi and 4G
Internal	CAN bus / RS485 / OCPP 1.6J

Local directives

UK	Compliant with PAS1899:2022, subclause 5.2, Table 2, "Height range requirements" (refer to manual for more details). Compliant to Public CP Regulation 2023 regarding manufacturer requirements*

Environmental specifications

Operating temperature	-25 °C ÷ 50 °C (downgrading starting from 50 °C)
Humidity	5 % ÷ 95 % RH, non-condensing
Max. altitude of installation	≤ 2.000 m
IP degree	IP55
Mechanical resistance	IK10 (not including screen and RFID module)
Cooling method	Fan cooling

* for I-FAST stations and compact stations

Features and benefits

Ultra-fast charging: up to 180 kW, with the possibility of adding Load Sharing functionality to I-FAST Station units to dynamically modulate the maximum power for each session, based on the vehicle's charging status.

Charging connectors:
- 1 x CCS2 (Wallbox version).
- 2 x CCS2 - 150A (Compact Station version).
- 2 x CCS2 - 250A with max. peak at 350A or 300A with max. peak at 500A (Station version).
- CHAdeMO/GBT available as options.

Interface: 7" TFT-LCD display and colored LED strips to indicate operating status (Green = available, Blue = in use, Red = failure).

Accessories: support for management of charging cables and support for installation on concrete floor (Station and Compact Station versions), fixing plate (Wallbox version).

Smart features:
- Onboard portal configuration and charge start via App or RFID card.
- OTA upgrade.
- Compact Station and Station versions available with AC MID or DC PTB energy meter, payment system and, for 150 to 180 kW models, charging connector with 500A peak output current.

Connectivity: all I-FAST charging stations can be networked via WiFi or Ethernet and 4G.

Compliance with calibration regulations: all DC charging stations of the I-FAST range are also available in a calibration-compliant version.

Plug&Charge ready: I-FAST charging stations are also available with the Plug&Charge function (ISO15118).