

# FUSION

## The charging point in public and private settings

The **FUSION range** is available in two versions, **FUSION Street** for installation on the ground, and **FUSION Wall** for installation on the wall.

It is the range of dual units designed to meet all the requirements of electric vehicle charging in public and private settings.

It incorporates Ethernet and Wi-Fi communications as standard, as well as advanced latest generation functions such as Dynamic Load Management 2.0 (DLM 2.0) and OCPP protocols.

Grid	FUSION Street/Wall	
	FS1MW / FW1MW	FS3MW / FW3MW
MID wattmeter	✓	✓
Manual Type A differential protection <sup>(1)</sup>	✓	✓
Overcurrent protection (Curve C)	✓	✓

### Notes

<sup>(1)</sup> Optionally, the differentials can be Type A resettable or Type B.



## FUSION FEATURES

### Functions

- Ground and wall versions, suitable for outdoor use.
- Front door for easy operation and maintenance.
- Single-phase and three-phase versions with up to 32 amps per socket.
- Multiple sockets available, mode 1&2 sockets, mode 3 cables and sockets.
- MID wattmeters.
- Warning message in case of power outage.
- Possible customization using vinyls on the four sides<sup>(1)</sup>.

### HMI

- RGB status LEDs.
- RFID reader.
- 4.3" color screen, multi-language.

### Communications and software

- Dual Ethernet port with Switch mode.

### Notes:

- <sup>(1)</sup> Large surface where vinyl can be applied.  
<sup>(2)</sup> 5 m optional.

- Wi-Fi.
- OCPP.
- DLM, static and dynamic power management with other Ingeteam DC and AC units.
- Web Manager.
- Modbus TCP, MQTT.
- Automatic software updates.
- Update via USB.

### Safety

- Differential protections and circuit breakers.
- Main switch for quick disconnection of the charger.
- Security lock with key.
- Door-opening sensor.

### Options

- GPRS - 2G/3G/4G communication.
- Contactless bank card reader.
- DC leak detector.
- Type A self-resetting differentials or Type B differentials.
- Smart DLM.
- Cloud Manager.

## CONNECTORS



**N2**  
Socket Type 2



**S2**  
Type 2 socket with shutters



**N4**  
CEE 7/3 Type F socket (Schuko)



**N7**  
CEE 7/5 Type E socket (Schuko)



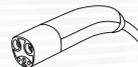
**S5**  
N7 and S2



**C1**  
Type 1 cable (4 m)<sup>(2)</sup>



**C2**  
Type 2 cable (4 m)<sup>(2)</sup>



**NACS**



	FUSION Street		FUSION Wall	
INPUTS AND OUTPUTS	Single-phase (FS1)	Three-phase (FS3)	Single-phase (FW1)	Three-phase (FW3)
Voltage	1 phase + N + PE 230 Vac ±15%	3 phases + N + PE 400 Vac ±15%	1 phase + N + PE 230 Vac ±15%	3 phases + N + PE 400 Vac ±15%
Frequency	50/60 Hz			
Rated current	64 A (32 A + 32 A)			
Rated power	14.8 kW (7.4 kW + 7.4 kW)	44 kW (22 kW + 22 kW)	14.8 kW (7.4 kW + 7.4 kW)	44 kW (22 kW + 22 kW)
Charging connectors	Configurable (Type 1 and 2 cables; Type 2 sockets, CEE 7/3 Type F, CEE 7/5 Type E)			
Charging mode	Modes 1, 2 and 3 according to installed sockets			
REGULATIONS AND SAFETY				
Standards	IEC-61851-1, IEC-61851-21-2, IEC-62196-2, IEC-61000			
Overcurrent	40 A Curve C circuit breaker protections (10 kA)			
Indirect contacts	30mA type A differential protections <sup>(1)</sup> DC leak detector (optional)			
Overvoltages	Overvoltage protection Type III			
FUNCTIONALITIES AND ACCESSORIES				
Communication interfaces	Ethernet (Switch mode) and Wi-Fi GPRS - 2G/3G/4G (optional)			
Communication protocols	OCPP 1.6, 2.0.1, Modbus RTU, Modbus TCP, MQTT			
HMI	4.3" color screen, multi-language RFID reader (Mifare Classic 1K&4K, MifareDesFire EV1, NFC) Contactless bank card reader (optional)			
GENERAL INFORMATION				
Stand-by consumption	< 10 W			
Energy measurement	2 x MID wattmeters			
Operating temperature	-25 °C to 50 °C			
Humidity	< 95%			
Maximum altitude	2,000 m (for heights above this, consult Ingeteam)			
Weight	33 kg (2 x Type 2)	33 kg (2 x Type 2)	24 kg (2 x Type 2)	24 kg (2 x Type 2)
Dimensions (h x w x d)	1400 x 320 x 215 mm	1400 x 320 x 215 mm	800 x 320 x 215 mm	800 x 320 x 215 mm
Enclosure	Galvanized steel   RAL 9003			
Protection class	IP54 / IK10 / C5H			
Markings	CE			
Directives	Low Voltage Directive: 2014/35/EU   EMC Directive: 2014/30/EU   RED Directive 2014/53/EU			

**Notes**

<sup>(1)</sup> Optionally, the differentials can be Type A resettable or Type B.

