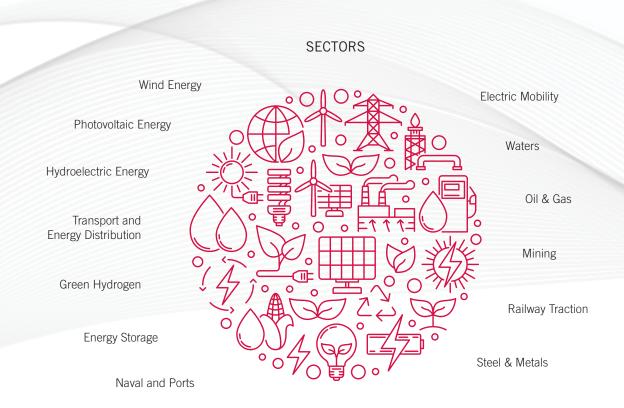


Ingeteam

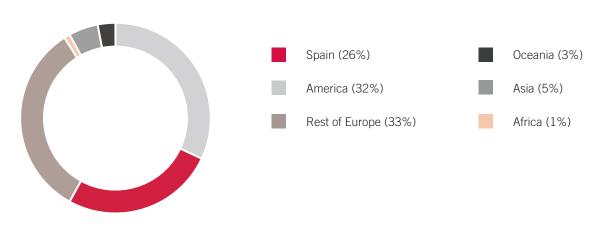
INNOVATION FOR OUR CUSTOMERS

INGETEAM is an international technology group specializing in **electrical energy conversion**.

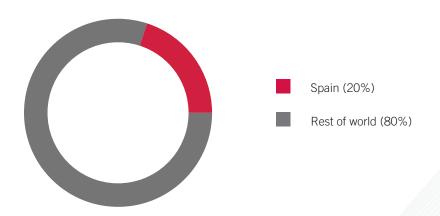
Its technological developments in **power and control electronics** (inverters, frequency converters, controllers and protections), Indar **rotating electrical machines** (motors, generators and motor-pump sets), **systems** (integration of electro-mechanical and automation engineering) and operation and maintenance **services**, allows it to offer solutions for the following sectors: wind, photovoltaic, hydroelectric and fossil generation, metal transformation industry, naval, railway traction, waters, electric vehicle charging, green hydrogen and electric power grids, including substations covering transport and distribution, always seeking more efficient energy generation and consumption.



Global billing



Final destination of products/services



Charging point models







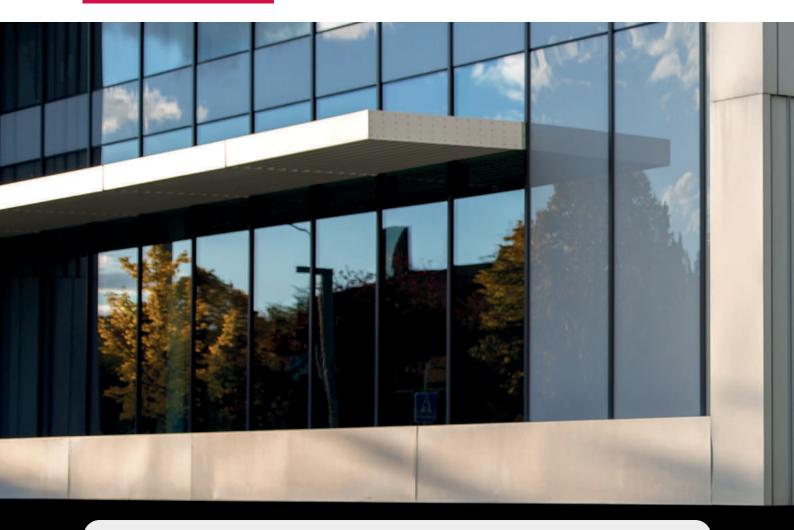




RAPID 60



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.

	FUSION Street/Wall		
	FS1MW/FW1MW	FS3MW / FW3MW	
Grid	Single phase	Three phase	
MID wattmeter	✓	✓	
Manual Type A differential protection ⁽¹⁾	✓	✓	
Overcurrent protection (Curve C)	✓	✓	

Notes

⁽¹⁾ Optionally, the differentials can be Type A resettable or Type B.

FUSION





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⁽¹⁾.

HMI

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

Communications and software

- Dual Ethernet port with Switch mode.

Notes:

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

1,400 mm

- 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.

CONNECTORS



N2 Socket Type 2



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)⁽²⁾

C2

Type 2 cable (4 m)(2)



NACS







800 mm

	FUSION	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) ⁽¹⁾			
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 (Typ	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 accor	ding to installed sockets		
REGULATIONS AND SAFETY					
Standards	IEC	-61851-1, IEC-61851-21	-2, IEC-62196-2, IEC-610	000	
Overcurrent		40 A Curve C circuit bre	aker protections (10 kA)		
Indirect contacts		30mA type A differential protections ⁽²⁾ DC leak detector (optional)			
Overvoltages ⁽³⁾		Overvoltage pro	otection Type III		
FUNCTIONALITIES AND ACCESSO	DRIES				
Communication interfaces		Ethernet (Switch mode) and Wi-Fi GPRS - 2G/3G/4G (optional)			
Communication protocols	0	OCPP 1.6, 2.0.1, Modbus RTU, Modbus TCP, MQTT			
НМІ	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		< 1	0 W		
Energy measurement		2 x MID wattmeters			
Operating temperature		-25 °C to 50 °C			
Humidity		< 95%			
Maximum altitude	4	2,000 m (for heights above this, consult Ingeteam)			
Weight	33 kg (2 x Type 2)	0 . 71 .	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			

Notes

Directives

Low Voltage Directive: 2014/35/EU | EMC Directive: 2014/30/EU | RED Directive 2014/53/EU

⁽³⁾ Manual or resettable protection depending on the model.



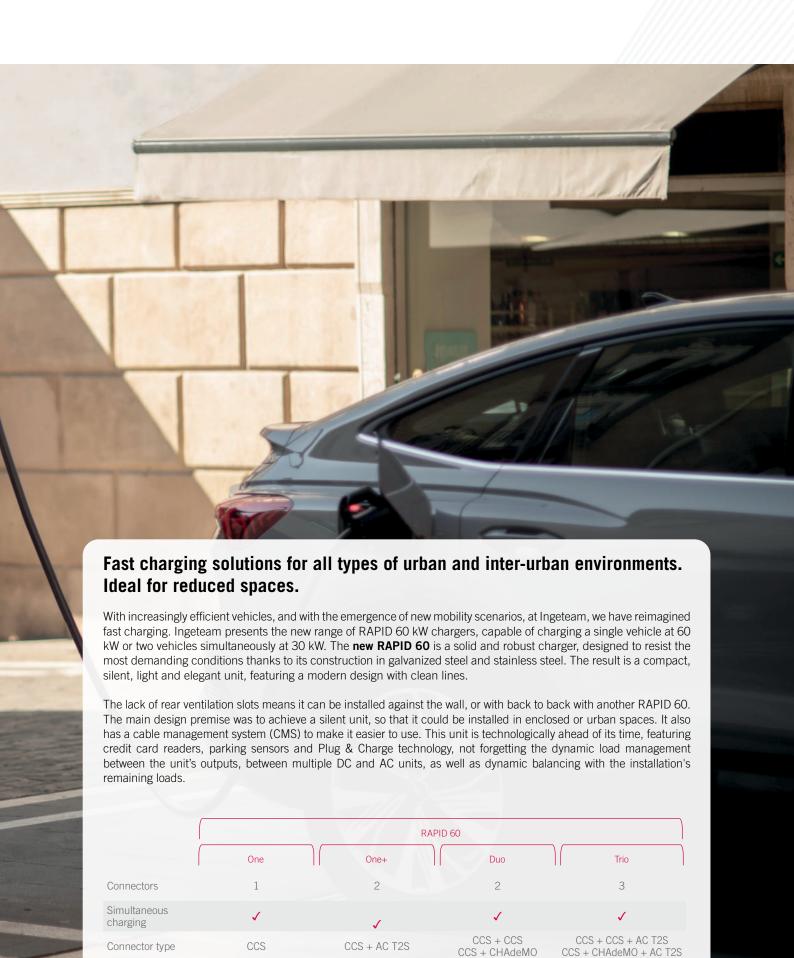
⁽¹⁾ For safety reasons, the equipment is factory limited to 32 A global (16 A per hose). This configuration can be modified through the Webmanager, following the process indicated in the corresponding Webmanager manual.

 $^{^{\}mbox{\tiny (2)}}$ Optionally, the differentials can be resettable Type A or Type B.

RAPID 60









RAPID 60 IN DATA

Functions

- Highly resistant enclosure, either galvanized steel or stainless steel.
- No ventilation slots on the back, can be installed against the wall or two units back to back.
- Can be positioned with a crane and pallet truck.
- Cable management system (CMS).
- Simultaneous AC and DC charging:
- DC: DC charging at 60 kW. Dual charging at 30 kW.
- · AC: 22 kW.
- Integrated DC wattmeters.
- AC MID wattmeter.

НМІ

- RGB status LEDs on supports and 360° ring.
- RFID reader.
- 10.1" color touchscreen, multi-language.

Communications and software

- Dual Ethernet port with Switch mode.
- RS485.

- OCPP, Autocharge, Plug & Charge.

- 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

- Built-in electrical protections.
- Security lock with key.
- Door-opening sensor.

Options

- GPRS 2G/3G/4G communication.
- Ethernet switch kit for 8 ports.
- Contactless bank card reader.
- Emergency button.
- Connector locking system.
- Parked vehicle detector.
- Self-resetting differentials.
- Smart DLM.
- Cloud Manager.

CONNECTORS



CCS1 150 CCS Type 1 150 A



CCS2 150 CCS Type 2 150 A



CHA125 CHAdeMO 125 A



NACS



AC 22 kW Type 2 socket with shutters





1,950 mm



	RAPID 60 One	RAPID 60 One+	RAPID 60 Duo	RAPID 60 Trio		
AC INPUT		3 phases +	N + PE			
Voltage		380/400 Va	c ±15%			
Frequency	50/60 Hz ±5%					
Rated current	96 A	128 A (96 A + 32 A)	96 A	128 A (96 A + 32 A)		
Rated power	60 kW	82 kW (60 kW + 22 kW)	60 kW	82 kW (60 kW + 22 kW		
OC OUTPUT						
/oltage range		150 - 1000 V				
Maximum current	150 A	150 A 150 A 200 A (100 A + 100 A)				
Maximum power	60 kW	60 kW 60 kW 60 kW (30 kV				
Charging connectors	CCS	CCS	CCS + CCS CCS + CHAdeMO	CCS + CCS CCS + CHAdeMO		
AC OUTPUT (OPTIONAL)						
/oltage	-	230/400 Vac ±15%	-	230/400 Vac ±15%		
Maximum current	-	32 A	-	32 A		
Maximum power	-	22 kW	-	22 kW		
Charging connectors		Type 2 socket with		Type 2 socket with		
marging connectors	_	shutters	_	shutters		
REGULATIONS AND SAFETY	1	FC 619E1 1 JFC 619E1 21 2 J	FC 610E1 22 JFC 619	DE1 04		
Standards	IEC 61851-1, IEC 61851-21-2, IEC 61851-23, IEC 61851-24 IEC 62196-2, IEC 62196-3, IEC 61000: DIN70121, ISO15118					
Overcurrent		Curve C circuit breaker	protections (20 kA)			
ndirect contacts ⁽¹⁾	30 mA (DC) differen protections ⁽²⁾ 30 mA differential protections ⁽²⁾ 30 mA type B (AC					
Overvoltages	differential protection Type 2 protection against permanent and transient overvoltages, both on DC inputs and outputs					
υνοι νυιταβευ		and out	puts	•		
	SSORIES	and out	puts	·		
FUNCTIONALITIES AND ACCES				al SIM (optional)		
FUNCTIONALITIES AND ACCES		and out witch mode), RS485, GPRS - 2 OCPP 1.6, 2.0.1, Modbus R	G/3G/4G (optional), du			
FUNCTIONALITIES AND ACCES Communication interfaces Communication protocols	Ethernet (S	witch mode), RS485, GPRS - 2 OCPP 1.6, 2.0.1, Modbus R 10.1" color touchscre FID reader (Mifare Classic 1K& 360° status F	G/3G/4G (optional), du TU, Modbus TCP, MQ en, multi-language 4K, Mifare DesFire EV1 GBB LEDs	TT		
FUNCTIONALITIES AND ACCES Communication interfaces Communication protocols HMI	Ethernet (S	witch mode), RS485, GPRS - 2 OCPP 1.6, 2.0.1, Modbus R 10.1" color touchscre FID reader (Mifare Classic 1K&	G/3G/4G (optional), du TU, Modbus TCP, MQ en, multi-language 4K, Mifare DesFire EV1 GBB LEDs	TT		
Communication interfaces Communication protocols HMI Plug & Charge (ISO15118)	Ethernet (S	witch mode), RS485, GPRS - 2 OCPP 1.6, 2.0.1, Modbus R 10.1" color touchscre FID reader (Mifare Classic 1K& 360° status R Contactless bank card	G/3G/4G (optional), du TU, Modbus TCP, MQ en, multi-language 4K, Mifare DesFire EV1 GBB LEDs	TT		
FUNCTIONALITIES AND ACCES Communication interfaces Communication protocols HMI Plug & Charge (ISO15118) SENERAL INFORMATION	Ethernet (S	witch mode), RS485, GPRS - 2 OCPP 1.6, 2.0.1, Modbus R 10.1" color touchscre FID reader (Mifare Classic 1K& 360° status F Contactless bank card Yes	G/3G/4G (optional), du TU, Modbus TCP, MQ en, multi-language 4K, Mifare DesFire EV3 GB LEDs d reader (optional)	TT		
Communication interfaces Communication protocols HMI Plug & Charge (ISO15118) GENERAL INFORMATION Stand-by consumption	Ethernet (S	witch mode), RS485, GPRS - 200CPP 1.6, 2.0.1, Modbus R 10.1" color touchscreur (Mifare Classic 1K& 360° status F Contactless bank card Yes	G/3G/4G (optional), du TU, Modbus TCP, MQ en, multi-language 4K, Mifare DesFire EV1 3GB LEDs d reader (optional)	TT		
Communication interfaces Communication protocols HMI Plug & Charge (ISO15118) GENERAL INFORMATION Stand-by consumption Efficiency and power factor	Ethernet (S	witch mode), RS485, GPRS - 2 OCPP 1.6, 2.0.1, Modbus R 10.1" color touchscre FID reader (Mifare Classic 1K& 360° status F Contactless bank card Yes	G/3G/4G (optional), du TU, Modbus TCP, MQ en, multi-language 4K, Mifare DesFire EV1 3GB LEDs d reader (optional)	AC (MID) and		
Communication interfaces Communication protocols HMI Plug & Charge (ISO15118) GENERAL INFORMATION Stand-by consumption Efficiency and power factor Energy measurement	Ethernet (S	witch mode), RS485, GPRS - 2 OCPP 1.6, 2.0.1, Modbus R 10.1" color touchscreum 360° status R Contactless bank card Yes < 70 > 95% at rated p	G/3G/4G (optional), du TU, Modbus TCP, MQ en, multi-language 4K, Mifare DesFire EV1 CGB LEDs d reader (optional) W bower; > 0.98	AC (MID) and DC meter ⁽³⁾		
Communication interfaces Communication protocols HMI Plug & Charge (ISO15118) GENERAL INFORMATION Chand-by consumption Efficiency and power factor Energy measurement Hose length	Ethernet (S R 5 m (4.	witch mode), RS485, GPRS - 2 OCPP 1.6, 2.0.1, Modbus R 10.1" color touchscree FID reader (Mifare Classic 1K& 360° status R Contactless bank card Yes < 70 > 95% at rated p DC meter 4 m usable length) with cable m	G/3G/4G (optional), du TU, Modbus TCP, MQ en, multi-language 4K, Mifare DesFire EV1 GB LEDs d reader (optional) W Dower; > 0.98	AC (MID) and DC meter ⁽³⁾		
Communication interfaces Communication protocols HMI Plug & Charge (ISO15118) EENERAL INFORMATION Stand-by consumption Efficiency and power factor Energy measurement Hose length Operating temperature	Ethernet (S R 5 m (4.	witch mode), RS485, GPRS - 2 OCPP 1.6, 2.0.1, Modbus R 10.1" color touchscree FID reader (Mifare Classic 1K&- 360° status F Contactless bank carr Yes < 70 > 95% at rated p DC meter 4 m usable length) with cable m 55°C (derating from 40°C)(4) Le	G/3G/4G (optional), du TU, Modbus TCP, MQ en, multi-language 4K, Mifare DesFire EVI 3GB LEDs d reader (optional) W bower; > 0.98 hanagement system (Cobw temperature kit at -	AC (MID) and DC meter ⁽³⁾		
Communication interfaces Communication protocols HMI Plug & Charge (ISO15118) SENERAL INFORMATION Stand-by consumption Efficiency and power factor Energy measurement Hose length Operating temperature Humidity	Ethernet (S R 5 m (4.	witch mode), RS485, GPRS - 2 OCPP 1.6, 2.0.1, Modbus R 10.1" color touchscree FID reader (Mifare Classic 1K& 360° status R Contactless bank carr Yes < 70 > 95% at rated p DC meter 4 m usable length) with cable m 55 °C (derating from 40 °C)(4) Lu < 95°	G/3G/4G (optional), du TU, Modbus TCP, MQ en, multi-language 4K, Mifare DesFire EVI GB LEDs d reader (optional) W bower; > 0.98 management system (C bow temperature kit at -	AC (MID) and DC meter ⁽³⁾ MS) included 35 °C (optional)		
Communication interfaces Communication protocols HMI Plug & Charge (ISO15118) SENERAL INFORMATION Stand-by consumption Efficiency and power factor Energy measurement Hose length Operating temperature Humidity Maximum altitude	Ethernet (S R 5 m (4. -25 °C to 5	Switch mode), RS485, GPRS - 20 OCPP 1.6, 2.0.1, Modbus R 10.1" color touchscreus GPID reader (Mifare Classic 1 K& 360° status F Contactless bank card Yes < 70 > 95% at rated p DC meter 4 m usable length) with cable m 55 °C (derating from 40 °C)(4) Location Company	G/3G/4G (optional), du TU, Modbus TCP, MQ en, multi-language 4K, Mifare DesFire EV3 GB LEDs d reader (optional) W bower; > 0.98 management system (C bow temperature kit at - % des, consult Ingeteam)	AC (MID) and DC meter ⁽³⁾ MS) included 35 °C (optional)		
Communication interfaces Communication protocols HMI Plug & Charge (ISO15118) GENERAL INFORMATION Stand-by consumption Efficiency and power factor Energy measurement Hose length Operating temperature Humidity Maximum altitude Veight	Ethernet (S R 5 m (4.	Switch mode), RS485, GPRS - 20 OCPP 1.6, 2.0.1, Modbus R 10.1" color touchscreus GPID reader (Mifare Classic 1K&c 360° status F Contactless bank card Yes < 70 > 95% at rated p DC meter 4 m usable length) with cable m 55 °C (derating from 40 °C)(4) L < 95° 2,000 m (for higher altitude) 145 kg	G/3G/4G (optional), du TU, Modbus TCP, MQ en, multi-language 4K, Mifare DesFire EV1 RGB LEDs d reader (optional) W bower; > 0.98 management system (C bow temperature kit at - d des, consult Ingeteam) 160 kg	AC (MID) and DC meter ⁽³⁾ MS) included 35 °C (optional)		
Communication interfaces Communication protocols HMI Plug & Charge (ISO15118) GENERAL INFORMATION Stand-by consumption Efficiency and power factor Energy measurement Hose length Operating temperature Humidity Maximum altitude Veight Dimensions (h x w x d)	Ethernet (S R 5 m (4. -25 °C to 5	Switch mode), RS485, GPRS - 20 OCPP 1.6, 2.0.1, Modbus R 10.1" color touchscreus Geren (Mifare Classic 1K&c 360° status F Contactless bank card Yes < 70 > 95% at rated p DC meter 4 m usable length) with cable m 55 °C (derating from 40 °C)(4) Lick 145 kg 1950 x 760 x	G/3G/4G (optional), du TU, Modbus TCP, MQ en, multi-language 4K, Mifare DesFire EV1 8GB LEDs d reader (optional) W bower; > 0.98 management system (C bow temperature kit at - 66 des, consult Ingeteam) 160 kg	AC (MID) and DC meter ⁽³⁾ MS) included 35 °C (optional)		
Communication interfaces Communication protocols Communication protoco	Ethernet (S R 5 m (4. -25 °C to 5	witch mode), RS485, GPRS - 20 OCPP 1.6, 2.0.1, Modbus R 10.1" color touchscreur color status FID reader (Mifare Classic 1K& 360° status FID contactless bank card Yes < 70 > 95% at rated property of the pro	G/3G/4G (optional), du TU, Modbus TCP, MQ en, multi-language 4K, Mifare DesFire EV1 8GB LEDs d reader (optional) W bower; > 0.98 management system (C bow temperature kit at - 6 des, consult Ingeteam) 160 kg 1335 mm teel optional) RAL 900	AC (MID) and DC meter ⁽³⁾ MS) included 35 °C (optional)		
Communication interfaces Communication protocols HMI Plug & Charge (ISO15118) GENERAL INFORMATION Stand-by consumption Efficiency and power factor Energy measurement Hose length Departing temperature Humidity Maximum altitude Weight Dimensions (h x w x d) Enclosure Protection class	Ethernet (S R 5 m (4. -25 °C to 5	witch mode), RS485, GPRS - 2 OCPP 1.6, 2.0.1, Modbus R 10.1" color touchscreus 11.6% 360° status R Contactless bank card Yes < 70 > 95% at rated p DC meter 4 m usable length) with cable m 55 °C (derating from 40 °C)(4) Lucus 145 kg 1950 x 760 x Galvanized steel (stainless status 11.50 cm) Galvanized steel (stainless status 11.50 cm) OCPR 1.6. 2.0.0.1 cm 145 kg 1950 x 760 x Galvanized steel (stainless status 11.50 cm)	G/3G/4G (optional), du TU, Modbus TCP, MQ en, multi-language 4K, Mifare DesFire EV1 2GB LEDs d reader (optional) W Dower; > 0.98 Danagement system (C ow temperature kit at - 60 des, consult Ingeteam) 160 kg 335 mm teel optional) RAL 900 0 / C5H	AC (MID) and DC meter ⁽³⁾ MS) included 35 °C (optional)		
Communication interfaces Communication protocols Communication Communication protocols Communication Communication protocols Communicati	Ethernet (S R 5 m (4. -25 °C to 5	witch mode), RS485, GPRS - 2 OCPP 1.6, 2.0.1, Modbus R 10.1" color touchscree 360° status R Contactless bank card Yes < 70 > 95% at rated p DC meter 4 m usable length) with cable m 55 °C (derating from 40 °C)(4) Li < 95° 2,000 m (for higher altitude 145 kg 1950 x 760 x Galvanized steel (stainless si IP54 / IK10 Side air ver	G/3G/4G (optional), du TU, Modbus TCP, MQ en, multi-language 4K, Mifare DesFire EV1 2GB LEDs d reader (optional) W Dower; > 0.98 Danagement system (C ow temperature kit at - 6 des, consult Ingeteam) 160 kg 160 kg 1335 mm teel optional) RAL 900 0 / C5H ntilation	AC (MID) and DC meter ⁽³⁾ MS) included 35 °C (optional)		
Communication interfaces Communication protocols HMI Plug & Charge (ISO15118) GENERAL INFORMATION Stand-by consumption Efficiency and power factor Energy measurement Hose length Departing temperature Humidity Maximum altitude Weight Dimensions (h x w x d) Enclosure Protection class Ventilation system Sound level	Ethernet (S R 5 m (4. -25 °C to 5	witch mode), RS485, GPRS - 2 OCPP 1.6, 2.0.1, Modbus R 10.1" color touchscree 360° status R Contactless bank card Yes < 70 > 95% at rated p DC meter 4 m usable length) with cable m 55 °C (derating from 40 °C)(4) Li < 95° 2,000 m (for higher altitud 145 kg 1950 x 760 x Galvanized steel (stainless si IP54 / IK10 Side air ver < 55 °C	G/3G/4G (optional), du TU, Modbus TCP, MQ en, multi-language 4K, Mifare DesFire EV1 2GB LEDs d reader (optional) W Dower; > 0.98 Danagement system (C ow temperature kit at - 6 des, consult Ingeteam) 160 kg 160 kg 1335 mm teel optional) RAL 900 0 / C5H ntilation	AC (MID) and DC meter ⁽³⁾ MS) included 35 °C (optional)		
FUNCTIONALITIES AND ACCES Communication interfaces Communication protocols HMI Plug & Charge (ISO15118) GENERAL INFORMATION Stand-by consumption Efficiency and power factor Energy measurement Hose length Departing temperature Humidity Maximum altitude Weight Dimensions (h x w x d) Enclosure Protection class Ventilation system Sound level Markings	5 m (4. -25 °C to £	witch mode), RS485, GPRS - 2 OCPP 1.6, 2.0.1, Modbus R 10.1" color touchscree 360° status R Contactless bank card Yes < 70 > 95% at rated p DC meter 4 m usable length) with cable m 55 °C (derating from 40 °C)(4) Li < 95° 2,000 m (for higher altitude 145 kg 1950 x 760 x Galvanized steel (stainless si IP54 / IK10 Side air ver	G/3G/4G (optional), du TU, Modbus TCP, MQ en, multi-language 4K, Mifare DesFire EV1 GB LEDs d reader (optional) W bower; > 0.98 Management system (C bow temperature kit at -0% des, consult Ingeteam) 160 kg 335 mm teel optional) I RAL 900 0 / C5H htilation dB	AC (MID) and DC meter ⁽³⁾ MS) included 35 °C (optional) 165 kg		

⁽¹⁾ Manual or resettable protection depending on the model.
(2) Protection type A or type B depending on the model.
(3) MID French market certification and Eichrecht certification in development.
(4) For simultaneous charging CHAdeMO AC derating in AC from 35°C onwards.

RAPID 120/180







RAPID 120/180 FEATURES

Functions

- Highly resistant enclosure made of stainless steel.
- Modular electronics. The 120 kW units can be expanded to 180 kW.
- Cable management system (CMS).
- Ambient light.
- Simultaneous AC and DC charging:
 - DC: DC charging at 180 kW.
 Dual charging at 90 kW.
 CHAdeMO up to 80 kW.
 - · AC: 22 kW.
- Integrated DC wattmeters.
- AC MID wattmeters.

НМІ

- RGB status LEDs.
- RFID reader.
- 7" color touchscreen, multi-language.

Communications and software

- Ethernet, RS485.
- OCPP, Autocharge, Plug & Charge.
- 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

- Built-in electrical protections.
- Security lock with key.
- Door-opening sensor.

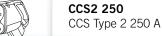
Options

- GPRS 2G/3G/4G communication.
- Ethernet switch kit for 8 ports.
- Contactless bank card reader.
- Emergency button.
- 21" Full HD advertising screen.
- Connector locking system.
- Parked vehicle detector.
- Smart DLM.
- Cloud Manager.

CONNECTORS



CCS1 200 CCS Type 1 200 A















2,300 mm

730 mm 774 mm



RAPID 120

RAPID 180

AC INPUT

Voltage 3 phases + N + PE; $380/400 \text{ Vac} \pm 15\%$

Frequency 50/60 Hz \pm 5%

Rated current 222 A (190 A + 32 A) 312 A (280 A + 32 A)
Rated power 142 A (120 kW + 22 kW) 202 A (180 kW + 22 kW)

DC OUTPUT

Voltage range 150 - 1,000 V

Maximum current 400 A (200 + 200 A) | 1 x 500 A @boost 500 A (250 + 250 A) | 1 x 500 A @boost

Maximum power 120 kW (60 + 60 kW) 180 kW (90 + 90 kW)

Charging connectors CCS | CCS + CCS | CCS + CHAdeMO

AC OUTPUT (OPTIONAL)

Voltage 400 Vac $\pm 15\%$

Maximum current32 AMaximum power22 kW

Charging connectors Type 2 socket with shutters

REGULATIONS AND SAFETY

Standards IEC 61851-1, IEC 61851-21-2, IEC 61851-23, IEC 61851-24, IEC 62196-2, IEC 62196-3, IEC 61000, DIN 70121, ISO 15118

Overcurrent Curve C circuit breaker protections (25 kA)

Indirect contacts

30 mA Type A (DC) differential protections
30 mA Type B (AC) differential protections

Overvoltages Type 2 protection against permanent and transient overvoltages, both on DC inputs and

outputs

FUNCTIONALITIES AND ACCESSORIES

Communication interfaces Ethernet, RS485,

GPRS - 2G/3G/4G (optional), dual SIM (optional)

Communication protocols OCPP 1.6, 2.0.1, Modbus RTU, Modbus TCP, MQTT

7" color touchscreen, multi-language

HMI RFID reader (Mifare Classic 1K&4K, Mifare DesFire EV1, NFC)

RGB status LEDs

Contactless bank card reader (optional)

Advertising screen 21" Full HD (optional)

Plug & Charge Yes

GENERAL INFORMATION

Stand-by consumption < 60 W < 85 W

Efficiency and power factor > 95% at rated power; > 0.98
Energy measurement AC (MID) and DC meter⁽¹⁾

Hose length 6.5 m (4,6 m usable length) with cable management system (CMS) included (2)

Operating temperature -25 °C to 55 °C (derating from 40 °C) | Low temperature kit at -35 °C (optional)

Humidity < 95%

Maximum altitude 2,000 m (for higher altitudes, consult Ingeteam)

Weight 380 kg 420 kg

Dimensions (h x w x d) 2300 x 774 x 730 mm

Enclosure Stainless steel and aluminum

Protection class IP54 / IK10 (IK08 display) / C5H

Markings CE

Directives

Low Voltage Directive: 2014/35/EU | EMC Directive: 2014/30/EU |

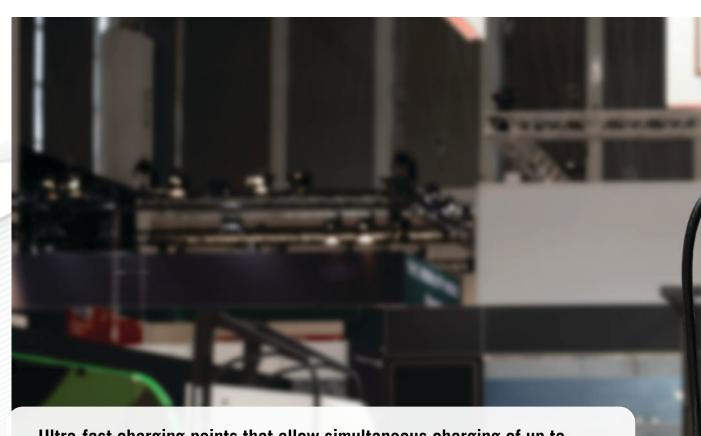
RED Directive 2014/53/EU

Notes

⁽¹⁾ MID certification (optional) and Eichrecht certification in process.

⁽²⁾ Optional 10 m without cable management system (CMS).

RAPID 420



Ultra-fast charging points that allow simultaneous charging of up to two vehicles

	RAPID 420			
	ONE	DUO	DUO/3	DUO/4
Connectors	1	2	2 & 1	2 & 2
Simultaneous charging		✓	✓	✓
Left side connector			NACS or CHAdeMO	NACS or CHAdeMO
Left front corrector	CCS or NACS	CCS or NACS	CCS or NACS	CCS or NACS
Right front connector		CCS or NACS	CCS or NACS	CCS or NACS
Right side connector				NACS





RAPID 420 FEATURES

Functions

- Excellent power density standalone charger.
- Highly resistant enclosure of stainless steel.
- Up to 4 cables in the same charger (up to 2 vehicles to be charged simultaneously).
- Flexibility to combine CCS, NACS & CHAdeMO connectors.
- Simultaneous DC charging:
 - Up to 2 vehicles at the same time.
 Possibility of granular split of power with increments of 60 kW.
- Integrated DC wattmeters.
- Configurable power versions: 420 kW, 360 kW, 300 kW & 240 kW.
- Configuration focused on the ease of use for the installer.

Communications and software

- DLM, static and dynamic power management with other Ingeteam DC and AC units.
- Web Manager.
- Modbus TCP, MQTT.
- Automatic software updates.
- Udpate via USB, Web Manager & OCPP.
- 31,5" Full HD advertising screen.

Safety

- Built-in electrical protections.
- Security lock with key.
- Door-opening sensor.

Options

- C-Fly System (Cable Fly System) useable length 5,4 m front, 4,7 m side.
- GPRS 4G communication.
- Ethernet switch kit for 8 ports.
- Contactless bank card reader.
- Emergency button.
- Parked vehicle detector.
- Smart DLM.
- Cloud Manager.

CONNECTORS



CCS 1 CCS Type 1 380 A Dry cooling 500 A Liquid cooling



CCS2
CCS Type 2
380 A Dry cooling
500 A Liquid cooling



CHA CHAdeMO 200 A



NACS 380 A Dry cooling 500 A Liquid cooling



2,500 mm



	RAPID 420	RAPID 420	RAPID 420	RAPID 420		
	420 kW	360 kW	300 kW	240 kW		
AC INPUT		2 05 200	V/400.V/ 150/			
Voltage IEC models		3 phases + PE; 380				
Voltage UL models		3 phases + PE; 480 Vac ±15%				
Frequency		50/60 Hz				
Rated current IEC version	637 A	546 A	455 A	364 A		
Rated current UL version	530 A	455 A	379 A	303 A		
OC OUTPUT						
Voltage range		150 - 1.000 V				
Maximum number of simultaneous charges		2				
Maximum number of connectors		2+2)			
Rated current per charge	500 A	500 A	500 A	500 A		
Maximum power	420 kW	360 kW	300 kW	240 kW		
Dynamic power (granularity)	minimum 90 kW + increments 60 kW	minimum 60 kW + increments 60 kW	minimum 30 kW + increments 60 kW	minimum 60 kW increments 60 kV		
Charging connectors (nominal currents)	Output 1 (left	t) any combination	Output 2 (right	t) any combination		
	Side connector	Front connector	Front connector	Side connector		
	NACS 375 A	CCS2 375 A	CCS2 375 A	NACS 375 A		
	NACS 500 A*	CCS2 500 A*	CCS2 500 A*	NACS 500 A*		
	CHAdeMO 200 A	CCS1 375 A	CCS1 375 A			
		CCS1 500 A*	CCS1 500 A*			
		NACS 375 A	NACS 375 A			
liquid cooling cable		NACS 500 A	NACS 500 A*			
REGULATIONS AND SAFETY						
Standards	IFC 61851-1, IFC 6185	51-21-2, IEC 61851-23, IEC 6	1851-24. IFC 62196-2. I	EC 62196-3. IEC 6100		
	,	DIN 70121, ISO 15118, UL2				
Overcurrent (Isc)		50 kA (other options, please consult)				
Indirect contacts	Adjustable	Differential protections 30 mA Type A auxiliary services Adjustable differential protections of 30 mA to 3 A Type A main power supply				
Overvoltages	Type 2 perman	ent and transient overvoltage	protection, both DC input	s and DC outputs		
FUNCTIONALITIES AND ACCESSORIES						
Communication interfaces		Ethernet, GPRS - 4G (option	al), double SIM (optional)		
Communication protocols		OCPP 1.6, 2.0.1, Modbus R	TU, Modbus TCP, MQTT			
HMI	31,5" color touchscreen, multi-language RFID reader (Mifare Classic 1K&4K, Mifare DesFire EV1, NFC)					
	RGB status LEDs Contactless bank card reader (optional) ¹					
Advertising screen		31,5" Fu	III HD			
Plug & Charge		Yes				
GENERAL INFORMATION						
Stand-by consumption		Pendi	ng			
Efficiency and power factor		95% a rated po	0			
Energy measurement		DC (MID) meter ⁽²⁾				
Cable length		With C-Fly System, usable length 5,4 m front 4,7 m side				
Operating temperature		-35°C to 55°C (derating from 40°C)				
Humidity		< 95'	ū			
Maximum altitude		2,000 m (for higher altitude				
Weight		1,000				
Dimensions (h x w x d)		2,500 x 900 x				
Enclosure		Stainless				
Protection class		IP54 / IK10 (display IK08) / C5H				
Markings		CE / UL (0				
Directives	Low Voltage Direct	tive: 2014/35/EU EMC Direct	ive: 2014/30/EU RED D	irective 2014/53/EU		

Notes (1) Worldline EP2 or Payter Apollo, PAX IM30.

DLM 2.0



Maximum use of the available power

Dynamic Load Management 2.0 (DLM 2.0) is the latest generation of the dynamic load management system incorporated as standard in all FUSION and RAPID models.

DLM 2.0 allows all sockets on each charging point to share the total power defined on the equipment in the most balanced and dynamic way possible, also allowing a set of units to be interconnected, defining a maximum power for them all so that they never exceed the assigned threshold, regardless of the number of vehicles charging simultaneously.

This means we can **optimize the use of the existing installation**, either due to contracted power or any other limitation of the installation.

GENERAL OPERATION

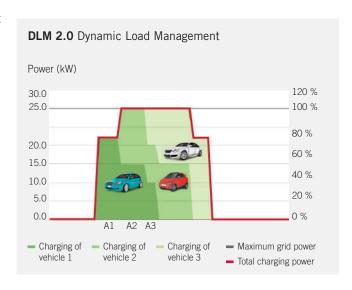
DLM 2.0 dynamically manages the load of each socket in the installation, depending on the number of vehicles that are charging, the types of socket or connector used and the actual current required by each vehicle, evaluating all of this in real time.

It is dynamic and versatile, as if one of the vehicles does not use all of the assigned current, that unconsumed current is redistributed to the other vehicles that are connected for better use of the available power.

It is possible to combine alternating and direct current points in the same group of charging points.

DLM 2.0 FEATURES

- Multiple units interconnected, in series or in a hub.
- Maximum power of the fixed charging installation.
- Instantaneous charging powers adjusted according to the number of vehicles charging and their consumption.





Smart power

Smart DLM is the latest evolution of the DLM 2.0 system for smart and dynamic management of the power in an installation that, in addition to chargers, is made up of other loads, such as those of an office or industry.

It consists of a grid analyzer, installed at the point to be managed and connected to a unit. All FUSION and RAPID models are compatible with Smart DLM and they can even be combined.

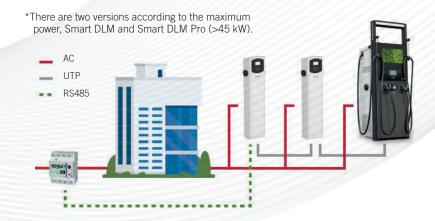
Smart DLM allows the overall power of the chargers to be modified in real time and dynamically, which will regulate their power as a whole, adapting to the other consumers in the installation.

This means that we can manage the power demand and avoid or minimize the need to increase the contracted power.

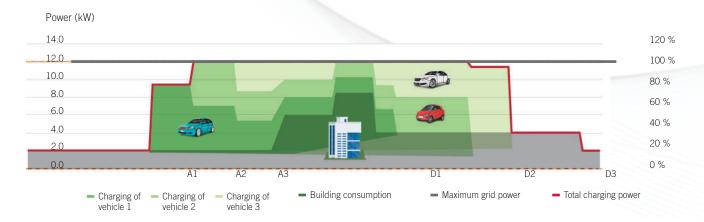
The Smart DLM system analyzes the power consumed by the entire installation at all times, including charging points.

SMART DLM 2.0 FEATURES

- Multiple units interconnected, in series or in a hub.
- Maximum power to be absorbed by the fixed grid.
- Instantaneous powers adjusted according to the vehicles charging and the total consumption of the installation.



Smart Dynamic Load Management















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