

	blueberry	blueberry FUSION	blueberry PLUS	blueberry CLUSTER
Output Power	50 kW	50-150 kW	50 - 600 kW	50 - 600 kW
Output Current	125 A	125 - 375 A	125-500 A	125 - 500 A
Output Voltage	150- 1000 v	150- 1000 v	150-1000 v	150-1000 v
Output Number	1	1 or 2	1 or 2	1 to 4 (kiosk and satellites)
INPUT				
Input Voltage [V a.c.]	340 to 530 +PE	340 to 530 +PE	340 to 530 +PE	340 to 530 +PE
Max. Input Current	90	N*90	N*90	N*90
Input Power [kVA]	53	N*53	N*53	N*53
Input Frequency [Hz]	50/60	50/60	50/60	50/60
Efficiency [%]	95	95	95	95
Power Factor	> 0.99	> 0.99	> 0.99	> 0.99
THDI [%]	< 4	< 4	< 4	< 4
OUTPUT CCS				
Voltage Range [V d.c.]	150 to 1000	150 to 1000	150 to 1000	150 to 1000
Max Current [A d.c.]	125	125, 250, 375	125,250, 300, 500	125, 250, 300,500
Max Power [kW]	50	N*50	N*50	N*50
OUTPUT CHAdeMO				
Voltage Range [V d.c.]	150 to 500	150 to 500	150 to 500	150 to 500
Max Current [A d.c.]	125	125, 200	125, 200	125, 200
Max Power [kW]	50	N*50	N*50	N*50
STANDARDS				
DC Charging Connection	EN IEC 61851-1/ EN 61851-23/ IEC 61851-21-2/ ISOI 5118 including Plug&Charge/ DIN70121/ CHAdeMO			
EMC Emission	IEC 61000-6-4, Industrial; Optional: IEC 61000-6-3, Residential			
EMC Immunity	IEC 61000-6-2, Industrial			
	(*N) — number of power modules			
ENVIRONMENT				
Operating Temperature [oco]	-35; +50	-35; +50	-35; +50	-35; +50
Max. Elevation [m]	2000	2000	2000	2000
Protection Degree	IP54	IP54	IP54	IP54
Humidity [%]	5 to 95, non-condensing	5 to 95, non-condensing	5 to 95, non-condensing	5 to 95, non-condensing
Operation Noise Level [dBA] @ 1 m	55	55	<55, power unit < 60	<55, power unit < 60
HMI				
Contactless card specification	ISO/IEC 14443A/B, ISO/IEC 15393, Mifare, NFC reader mode; Optional: bank card reader, GooglePay and ApplePay			
Local Interface	Touch screen 32"	Touch screen 32"	Touch screen 32"	Touch screen 32"
Communication Protocol	ocpp 1.6 / 2.0	ocpp 1.6 / 2.0	OCPP 1.6 / 2.0	ocpp 1.6/2.0
Network Connection	2G/ 30/ 4G (LTE) Modem; 10/100 Base-T Ethernet			
Backend	i-charging is currently integrated with 25+ back-end systems. For example; Spirii, Ampeco, Current etc. We also offer a web-based communication module (my-i-charging) where all nesessary information is available.			
Smart and/or dynamic charging	All Blueberry chargers include Dynamic Blue™ technology, whose patent application has already been submitted, which allows simultaneous charging above 50kW and sequential charging when there is more than 1 output. This technology will allow optimization of the total charging time, optimising the working curve lines of the power modules used in the Blueberry product range. Another advantage is grid connetion, in situations were there are more that 3 dispensers the necessary power from the grid can be optimized (reduced) keeping the same service for the customer (high power charging). In the prepective of the operator, this representes cost optimization – lower grid costs and lower investment in charging equipment. The last advangae is higher availability, the modular arqiteture of the system allows for redundancy, which means more up time.			
Surge protection and earth faul protection	Surge suppressor Type 2 / 1CA - Class II, is installed in the AC input of the blueberry chargers (User unit and Power Unit). The blueberry chargers need to be connected to the protective earth (PE). Accessible conductive parts and all internal non live conductive parts are bonded to ensure safety. Insulation testing - blueberry chargers have implemented an IMD at the DC output according to IEC 61557-8. This IMD is monitoring the impedance of the DC output, positive to earth and negative to earth. In case of an error during a charging session the charge will stop. Every hour the IMD component is tested with a self-test. In case of an alarm or error during the charging session, the component does a self-test at the end of that charging session.			
Offline mode	The charger work despite downtime on the connection or backend sytem using a white list and cache list			
MECHANICAL				
Dimensions [H x D x W] [mm] [inches]	2000x405x690 (kiosk)	2000x540x1000	1600x650x1500 (power unit)	1400x220x700 (satellite)
Impact Protection	IK10 (Including display)	IK10 (Including display)	IK10 (Including display)	IK10 (Including display)
Housing	Steel	Steel	Steel	Steel
Corrosion Protection (ISO 12944:2018)	C5	C5	C5	C5
Recycle	97% of the components are recyclable			

All values at 25c, except where indicated. Optional features such as payment terminals may have a different IP and/or 1K. Non-contractual information. i-charging reserves the right to change this specification.