

# **EXP180K2-FT DC FAST CHARGER**

CCS / CHAdeMO/ GBT 180kW/240kW



### **MAIN FEATURES**

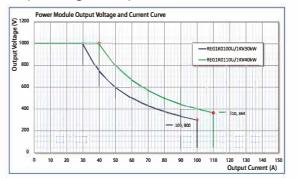
- ► CCS1, CCS2, CHAdeMO and GBT support
- ▶ IP55 design with high protection and high reliability for harsh environment
- ▶ OCPP 1.6 J support with update sw to 2.0, smart charge and power management support
- ▶ Optional CoolRing™ function realize the power transfer between the two chargers which can get both power in one charger
- ▶ Power can also transfer between the two DC connectors, and also can output at the same time for the two DC connectors
- Max output power upto 180kW /240kW and max current upto 300A, and compatible with the voltage from 150V to 1000V
- ▶ Full safety function with output contactor and fuse, EPO, SPD, RCD, leakage switch, insulation detector protection
- ▶ User friendly interface with tempered glass protective 7" TFT capacitive touch screen LCD
- ▶ Multiple charging modes: Auto basis, Time basis, Amount basis, Energy basis, SOC basis
- ▶ Multiple power distribution modes: Stand alone, Current switch, Plug switch, Full hold, Master slave
- ▶ Internal high precision DC energy meter, optional VDE and PDB certicification type
- ▶ LAN and optional LTE wireless support, OTA support, RFID authorization, Mobile App payment and Credit Card support
- ▶ Optional cable re-tractors and charging statu RGB light

# **INFY POWER**

## 2022.12 VER:2.0

#### REG1K0100G/U 30kW1KV/ REG1K0110U 40kW1KV

Output Voltage VS Output Current



### TWO 180KW CHARGERS COOLRING™ WORKING:

- Each charging connector can get max. 180kW power.
- Every connector can all get 90kW power at the same time.
- One charger can get all 360kW power charging to one EV.



## **TECHNICAL PARAMETERS**

AC Frequency	Input parameters	EXP180K2	EXP240K5	
Total harmonic current	AC Frequency	45-65Hz		
Stall harmonic current   S23A/CE, 228A/UL	_AC Voltage	3-phases+N+PE, 380/400Vac(±10%)		
Data   Exemposic current   323A/CE, 228A/UL   420A/CE, 307A/UL	Power Factor	>0.99		
Output parameters         EXP180K2         EXP240K5           Output Dc voltage range         < ±0.5%	_Total harmonic current			
Output DC voltage range         <±0.59%	Total harmonic current	323A/CE, 228A/UL	420A/CE, 307A/UL	
Max DC output current         DC 150V-1000V           Max DC output current         600A@300V/360A@500W 180A@1000V         659A@364V/480A@500V/240A@1000V           Constant power voltage range         200A1000V CCS (optional 250A CCS2 or 300A CCS1), 250A/50V GBT, 125A500V CHAdeMO           Max system efficiency         180WW         240kW           Optional AC charging output         > 95.0% (Rated input and output)           Working environment         Ambient temperature         40 ~ +75°C           Ambient temperature         40 ~ +75°C         full power output below 50°C, Power derating 5%/ °C above 50°C           Ambient temperature         40 ~ +75°C         Storage temperature         0 ~ 95%           Working altitude         2000 m         Standard           CCS FLC communication         DIN70121 and ISO15118         C           CHAdeMO         CHAdeMO         CHAdeMO CHAdeMO (CHAdeMO)         CHAdeMO (CHADEMO)           CHADEMO         CHADEMO (CHADEMO)         CHADEMO (CHADEMO)         CHADEMO (CHADEMO)           Function and Interface         IPS5 / IK10         Function and Interface         IPS5 / IK10           Function interface         OCE onergy meters (GMT 50063-2008 and DI/T 5137-2008 standard, optional VDE and PTB certification type           Monitor interface         OCE onergy meters (GMT 50063-2008 and DI/T 5137-2008 standard, optional VDE and PTB ce	Output parameters	EXP180K2	EXP240K5	
Max DC output current	Output DC voltage range			
Constant power voltage range   200A100DV CCS (optional 250A CCS2 or 300A CCS1), 250A750V GBT, 125A500V CH4deMO	Max DC output current	DC 150V-1000V		
Max system efficiency Optional AC charging output  >95.0% (Rated input and output)  Working environment  Ambient temperature -40 - +75°C Storage temperature -40 - +75°C Storage temperature -40 - +75°C Working altitude -2000 m  Standard  CCS PLC communication  DIN70121 and ISO15118  CH-ddeMO CH-ddMO CH-ddeMO	Max DC output current	600A@300V/ 360A@500V/ 180A@1000V	659A@364V/ 480A@500V/ 240A@1000V	
Spinoral AC charging output   Spi	Constant power voltage range	200A1000V CCS (optional 250A CCS2 or 300A C	CCS1), 250A750V GBT, 125A500V CHAdeMO	
Working environment         Ambient temperature       -25 − +70°C , full power output below 50°C, Power derating 5%/°C above 50°C         Ambient temperature       -40 ~ +75°C         Storage temperature       0 − 95%         Working altitude       2000 m         Standard       2000 m         CCS PLC communication       DIN70121 and ISO15118         CH-4deMO       CH-4deMO VI. 2         GBT       GB/T 18487.1-2015, GB/T 27930-2015, GB/T 20234.1-3-2015         EMC/Safety       UL2202, CE, ENG1000-6-3/ENG1000-6-1 Class A ; EN 61851-1/EN 61851-23/EN 61851-24         Protection Class       IP55 / IK10         Function and Interface         HMI       7" TFT tempered glass protective touch screen LCD, RFID, RGB panel LED         Monitor interface       DC energy meter, GB/T 50063-2008 and DL/T 5137-2008 standard, optional VDE and PTB certification type         Monitor interface       OCPP 1.6, LAN 10M/10M and LTE wireless modern support         Charging Mode       Auto basis, Time basis, Amount basis, Energy basis, SOC basis         Power distribution modes       Stand alone, Current swirch, Flug witch, Full hold, Master slave         Auxiliary function       Credit card reader installation. Charging cable tracer installation         Mechanical       Dimensions(W * H * D mm)       700 * 1750 * 750 mm         Weight(Kg)	Max system efficiency	180kW	240kW	
Ambient temperature  -25 ~ +70°C , full power output below 50°C , Power derating 5%/°C above 50°C  Ambient temperature  -40 ~ +75°C  0 ~ 95%  Working altitude  2000 m  Standard  CCS PLC communication  DIN70121 and ISQ15118  CCHAdeMO  CHAdeMO CHAdeMO VI.2  GBT GB/T 18487.1-2015, GB/T 27930-2015, GB/T 20234.1—3-2015  EMC/Safety  UL2202, CE, EN61000-6-3/EN61000-6-1 Class A; EN 61851-1/EN 61851-23/EN 61851-24  Protection Class  Protection Class  IP55 / IK10  Function and Interface  HMI 7' TFT tempered glass protective touch screen LCD, RFID, RGB panel LED  Metering DC energy meter, GB/T 50063-2008 and DL/T 5137-2008 standard, optional VDE and PTB certification type  Monitor interface  Charging Mode Auto basis, Time basis, Amount basis, Energy basis, SOC basis  Stand alone, Current switch, Plug switch, Full hold, Master slave  Auxiliary function  Credit card reader installation. Charging cable tracer installration  Mechanical  Dimensions(W *H *D mm)  700 * 1750 * 750 mm  Weight (Kg)  Charging Protection  Charger module configuration  Charger module configuration  Charging connector configuration  Charging connector configuration  Charging connector configuration  Charging connector configuration  Charging aconnector configuration  Charging connector	Optional AC charging output	>95.0% (Rated input	>95.0% (Rated input and output)	
Ambient temperature  .40 - +75°C Storage temperature  0 ~ 9596  Working altitude  2000 m  Standard  CCS PLC communication  DIN70121 and ISO15118  CHAdeMO  CHAdeMO CHAdeMO VI.2  GBT GB/T 18487.1-2015, GB/T 20234.1-3-2-015  EMC/Safety  UL2202, CE, EN61000-6-3/EN61000-6-1 Class A; EN 61851-1/EN 61851-23/EN 61851-24  Protection Class  Function and Interface  HMI 7" TFT tempered glass protective touch screen LCD, RFID, RGB panel LED  Metering DC energy meter, GB/T 50063-2008 and DL/T 5137-2008 standard, optional VDE and PTB certification type  OCMP 1.6, 1.AN 10M/100M and LTE wireless modern support  Charging Mode Auto basis, Time basis, Amount basis, Energy basis, SOC basis  Power distribution modes  Stand alone, Current switch, Plug switch, Full hold, Master slave  Auxiliary function Credit card reader installation. Charging cable tracer installration  Mechanical  Dimensions(W * H * D mm) 700 * 1750 * 750 mm  Weight(Kg) 280 + 21 * N (N is the charger module configuration number)  Charging Protection  Charging Connector configuration  Charging connector configuration  Charging connector capacity  Configuration  Charging aconnector capacity  Configuration  Charging module configuration  Charging module configuration  Charging connector configuration	Working environment			
Storage temperature  0 - 9596  Working altitude  2000 m  Standard  CCS PLC communication  DIN70121 and ISO15118  CH4deMO  CH4deMO  CH4deMO  GH4deMO  GH4deMO	Ambient temperature	-25 $\sim$ +70°C , full power output below 50°C, Power derating 5%/ $^{\circ}$ C above 50°C		
Standard   CCS PLC communication   DIN70121 and ISO15118   CHAdeMO   CHADE	Ambient temperature	-40 ~ +75°C		
Standard  CCS PLC communication  DIN70121 and ISO15118  CHAdeMO  CHAdeMO VI.2  GBT  GBY IB487.1-2015, GB/T 27930-2015, GB/T 20234.1~3-2015  EMC/Safety  UL2202, CE, EN61000-6-3/EN61000-6-1 Class A; EN 61851-1/EN 61851-23/EN 61851-24  Protection Class  IP55 / IK10  Function and Interface  HMI  7" TFT tempered glass protective touch screen LCD, RFID, RGB panel LED  Metering  DC energy meter, GB/T 50063-2008 and DL/T 5137-2008 standard, optional VDE and PTB certification type  Monitor interface  Charging Mode  Auto basis, Time basis, Amount basis, Energy basis, SOC basis  Power distribution modes  Stand alone, Current switch, Plug switch, Full hold, Master slave  Audiliary function  Credit card reader installation. Charging cable tracer installration  Mechanical  Dimensions(W * H * D mm)  700 * 1750 * 750 mm  Weight(Kg)  280 + 21 * N (N is the charger module configuration number)  Charging Protection  Charging connector configuration  Charging connector configuration  Charging connector configuration  Charging connector capacity  Configuration  Charging connector configuration  Charging connector configuration  Charging connector configuration  Charging connector configuration  6 power module slots, 1000V30kW power module for 180kW, 1000V40kW power module for 240kW  Charging connector configuration  6 power module slots, 1000V30kW power module for 180kW, 1000V40kW power module for 240kW  Charging connector configuration	Storage temperature	0 ~ 95%		
CCS PLC communication  DIN70121 and ISO15118  CHAdeMO  CHAdeMO V1.2  GBT  GB/T 18487.1-2015, GB/T 27930-2015, GB/T 20234.1~3-2015  EMC/Safety  UL2202, CE, EN61000-6-3/EN61000-6-1 Class A; EN 61851-1/EN 61851-23/EN 61851-24  Protection class  IP55 / IKI0  Function and Interface  HMI  7" TFT tempered glass protective touch screen LCD, RFID, RGB panel LED  Metering  DC energy meter, GB/T 50063-2008 and DL/T 5137-2008 standard, optional VDE and PTB certification type  Monitor interface  Charging Mode  Auto basis, Time basis, Amount basis, Energy basis, SOC basis  Power distribution modes  Stand alone, Current switch, Pulg switch, Full hold, Master slave  Audiliary function  Credit card reader installation. Charging cable tracer installration  Mechanical  Dimensions(W * H * D mm)  Weight(Kg)  Charging Protection  Charging connector configuration  Charging connector configuration  Charging connector configuration  Charging connector capacity  Configuration  Charging connector configu	Working altitude	2000 m		
CHAdeMO CHAdeMO VI.2  GBT GB/T 18487.1-2015, GB/T 27930-2015, GB/T 20234.1~3-2015  EMC/Safety UL2202, CE, EN61000-6-3/EN61000-6-1 Class A; EN 61851-1/EN 61851-23/EN 61851-24  Protection Class IP55 / IK10  Function and Interface HMI 7" TFT tempered glass protective touch screen LCD, RFID, RGB panel LED  Metering DC energy meter, GB/T 50063-2008 and DL/T 5137-2008 standard, optional VDE and PTB certification type  Monitor interface Charging Mode Auto basis, Time basis, Amount basis, Energy basis, SOC basis Power distribution modes Stand alone, Current switch, Plug switch, Full hold, Master slave Auxiliary function Credit card reader installation. Charging cable tracer installration  Mechanical Dimensions(W * H * D mm) Weight(Kg) 280 + 21 * N (N is the charger module configuration number)  Charging Protection Charging connector configuration Charging connector capacity RCD-A main protection, SPD protection  Charging connector configuration Charger module configu	Standard			
GBT GBT 18487.1-2015, GB/T 27930-2015, GB/T 20234.1-3-2015 EMC/Safety UL2202, CE, EN61000-6-3/EN61000-6-1 Class A; EN 61851-1/EN 61851-23/EN 61851-24 Protection Class IP55 / IK10  Function and Interface HMI 7° TFT tempered glass protective touch screen LCD, RFID, RGB panel LED Metering DC energy meter, GB/T 50063-2008 and DL/T 5137-2008 standard, optional VDE and PTB certification type Monitor interface OCPP 1.6], LAN 10M/100M and LTE wireless modem support Charging Mode Auto basis, Time basis, Amount basis, Energy basis, SOC basis Power distribution modes Stand alone, Current switch, Plug switch, Full hold, Master slave Auxiliary function Credit card reader installation. Charging cable tracer installration  Mechanical Dimensions(W * H * D mm) 700 * 1750 * 750 mm Weight(Kg) 280 + 21 * N (N is the charger module configuration number)  Charging Protection Charging connector configuration Charging connector configuration Charging connector capacity RCD-A main protection, SPD protection  Charger module configuration Charger module configuration 6 power module slots, 1000V30kW power module for 180kW, 1000V40kW power module for 240kW Charging connector configuration 2 CCS/2 GBT / I CCS+1 CHAdeMO / I CCS+1 GBT	CCS PLC communication	DIN70121 and ISO15118		
EMC/Safety  UL2202, CE, EN6 1000-6-3/EN6 1000-6-1 Class A; EN 61851-1/EN 61851-23/EN 61851-24  Protection Class  Function and Interface  HMI  7" TFT tempered glass protective touch screen LCD, RFID, RGB panel LED  DC energy meter, GB/T 50063-2008 and DL/T 5137-2008 standard, optional VDE and PTB certification type  Monitor interface  Charging Mode  Auto basis, Time basis, Amount basis, Energy basis, SOC basis  Power distribution modes  Audilary function  Mechanical  Dimensions(W*H*Dmm)  Veight(Kg)  Charging Protection  Charging Protection  Charging connector configuration  Charging connector capacity  Configuration  Charger module configuration  Charger modu	CHAdeMO	CHAdeMO VI .2		
Protection Class  IPS5 / IK10  Function and Interface  HMI  7" TFT tempered glass protective touch screen LCD, RFID, RGB panel LED  Metering  DC energy meter, CB/T 50063-2008 and DL/T 5137-2008 standard, optional VDE and PTB certification type  Monitor interface  OCPP I.6], LAN 10M/100M and LTE wireless modern support  Charging Mode  Auto basis, Time basis, Amount basis, Energy basis, SOC basis  Power distribution modes  Stand alone, Current switch, Plug switch, Full hold, Master slave  Auxiliary function  Credit card reader installation. Charging cable tracer installration  Mechanical  Dimensions(W * H * D mm)  Weight(Kg)  Charging Protection  Charger module configuration  Charger module configuration  Charging connector configuration  Charging connector capacity  Configuration  Charger module configuration  Charger module configuration  Charger module configuration  Charger module configuration  Charging connector capacity  Configuration  Charger module configuration  Charger mod		GB/T 18487.1-2015, GB/T 27930-2015, GB/T 20234.1~3-2015		
Function and Interface  HMI	· .			
HMI 7" TFT tempered glass protective touch screen LCD, RFID, RGB panel LED  Metering DC energy meter, GB/T 50063-2008 and DL/T 5137-2008 standard, optional VDE and PTB certification type  Monitor interface OCPP 1.6], LAN 10M/100M and LTE wireless modem support  Charging Mode Auto basis, Time basis, Amount basis, Energy basis, SOC basis  Power distribution modes Stand alone, Current switch, Plug switch, Full hold, Master slave  Auxiliary function Credit card reader installation. Charging cable tracer installration  Mechanical  Dimensions(W * H * D mm) 700 * 1750 * 750 mm  Weight(Kg) 280 + 21 * N (N is the charger module configuration number)  Charging Protection  Charging connector configuration Over current protection, Short circuit protection, Over voltage protection, Under voltage protection  Charging connector capacity RCD-A main protection , SPD protection  Configuration  Charger module configuration 6 power module slots, 1000V30kW power module for 180kW, 1000V40kW power module for 240kW  Charging connector configuration 2 CCS/2 GBT / 1 CCS+1 CHAdeMO / 1 CCS+1 GBT	Protection Class	IP55 / IK10		
Metering  DC energy meter, GB/T 50063-2008 and DL/T 5137-2008 standard, optional VDE and PTB certification type  OCPP 1.6] , LAN 10M/100M and LTE wireless modem support  Auto basis, Time basis, Amount basis, Energy basis, SOC basis  Power distribution modes  Stand alone, Current switch, Plug switch, Full hold, Master slave  Auxiliary function  Credit card reader installation. Charging cable tracer installration  Mechanical  Dimensions(W * H * D mm)  Weight(Kg)  280 + 21 * N (N is the charger module configuration number)  Charging Protection  Charging connector configuration  Charging connector configuration  Charging connector capacity  Configuration  Charger module configuration  Charger module configuration  Charging connector capacity  Configuration  Charger module configuration  Charger module configuration  Charging connector capacity  Configuration  Charger module configuration  Charger module configuration  Charger module configuration  Charging connector capacity  Configuration  Charger module configura	Function and Interface			
Monitor interface  OCPP 1.6j , LAN 10M/100M and LTE wireless modem support  Auto basis, Time basis, Amount basis, Energy basis, SOC basis  Power distribution modes  Auxiliary function  Credit card reader installation, Charging cable tracer installration  Mechanical  Dimensions(W * H * D mm)  Weight(Kg)  Charging Protection  Charger module configuration  Charging connector configuration  Charging connector capacity  Configuration  Charger module configuration  Charger module configuration  Charger module configuration  Charger module configuration  Charging connector capacity  Configuration  Charger module configuration  Charging connector configuration  Charging connector configuration  Charging connector configuration  Charging connector configuration  Configuration  Charging connector configuration  Charging connector configuration	HMI	7" TFT tempered glass protective touch screen LCD, RFID, RGB panel LED		
Charging Mode Auto basis, Time basis, Amount basis, Energy basis, SOC basis  Power distribution modes Auxiliary function Credit card reader installation. Charging cable tracer installaration  Mechanical Dimensions(W * H * D mm) Weight(Kg)  Charging Protection Charger module configuration Charging connector configuration Charging connector capacity  Configuration Charger module configuration Charger module configuration Charger module configuration Charging connector capacity  Configuration Charger module configuration Charger module configuration Charger module configuration Charging connector capacity  Configuration Charger module configuration	Metering			
Power distribution modes  Stand alone, Current switch, Plug switch, Full hold, Master slave  Credit card reader installation. Charging cable tracer installration  Mechanical  Dimensions(W * H * D mm)  Weight(Kg)  Charging Protection  Charger module configuration  Charging connector configuration  Charging connector capacity  Configuration  Charger module configuration  Charger module configuration  Charging connector capacity  Configuration  Charger module configuration  Charger module configuration  Charging connector capacity  Configuration  Charger module configurati	Monitor interface			
Auxiliary function  Credit card reader installation. Charging cable tracer installration  Mechanical  Dimensions(W * H * D mm)  Weight(Kg)  Charging Protection  Charger module configuration  Charging connector configuration  Charging connector capacity  Configuration  Charger module configuration  Charging connector capacity  Configuration  Charger module configuration  Charging connector configuration  Charging connector configuration  Charging connector configuration  Charging connector capacity  Configuration  Charger module configuration  Charging connector configuration				
Mechanical  Dimensions(W * H * D mm)  Weight(Kg)  Charging Protection  Charger module configuration  Charging connector configuration  Charging connector capacity  Configuration  Charger module configuration  Charging connector capacity  Configuration  Charging connector configuration  Charging connector capacity  Configuration  Charging connector capacity  Configuration  Charger module config				
Dimensions(W * H * D mm)  Weight(Kg)  Charging Protection  Charger module configuration  Charging connector configuration  Charging connector capacity  Configuration  Charger module configuration	Auxiliary function	Credit card reader installation. Charging cable tracer installration		
Weight(Kg)  280 +21 * N (N is the charger module configuration number)  Charging Protection  Charger module configuration  Charging connector configuration  Charging connector capacity  Configuration  Charger module configuration  Charging connector capacity  Configuration  Charger module configuration  Charging connector capacity  Configuration  Charger module configuration	Mechanical			
Charging Protection  Charger module configuration  Charging connector configuration  Charging connector capacity  Configuration  Charger module configuration  Charging connector capacity  Configuration  Charging connector capacity  Configuration  Charger module configuration  Charging connector configuration  Charger module configuration	Dimensions(W * H * D mm)	700 * 1750 * 750 mm		
Charger module configuration  Charging connector configuration  Charging connector capacity  Charger module configuration  Charging connector capacity  Configuration  Charger module configuration	Weight(Kg)	280 +21 * N (N is the charger module configuration number)		
Charging connector configuration Charging connector capacity  Charging connector capacity  Configuration  Charger module configuration  Charging connector configuration  Charging connector configuration  Charger module configuration  Charging connector configuration  Charger module slots, 1000V30kW power module for 180kW, 1000V40kW power module for 240kW  Charging connector configuration  Charger module slots, 1000V30kW power module for 180kW, 1000V40kW power module for 240kW	Charging Protection			
Charging connector capacity  RCD-A main protection , SPD protection  Configuration  Charger module configuration 6 power module slots, 1000V30kW power module for 180kW, 1000V40kW power module for 240kW  Charging connector configuration 2 CCS / 2 GBT / 1 CCS + 1 CHAdeMO / 1 CCS + 1 GBT	Charger module configuration	Over current protection, Short circuit protection, Over voltage protection, Under voltage protection		
Configuration  Charger module configuration 6 power module slots, 1000V30kW power module for 180kW, 1000V40kW power module for 240kW  Charging connector configuration 2 CCS / 2 GBT / 1 CCS + 1 CHAdeMO / 1 CCS + 1 GBT	Charging connector configuration	Insulation monitoring, Protect Earth connect monitoring, Reverse polarity protection, Over temperature protection		
Charger module configuration 6 power module slots, 1000V30kW power module for 180kW, 1000V40kW power module for 240kW  Charging connector configuration 2 CCS / 2 GBT / 1 CCS + 1 CHAdeMO / 1 CCS + 1 GBT	Charging connector capacity	RCD-A main protection , SPD protection		
Charger module configuration 6 power module slots, 1000V30kW power module for 180kW, 1000V40kW power module for 240kW  Charging connector configuration 2 CCS / 2 GBT / 1 CCS + 1 CHAdeMO / 1 CCS + 1 GBT	Configuration			
	Charger module configuration	6 power module slots, 1000V30kW power module for 180kW, 1000V40kW power module for 240kW		
	Charging connector configuration	2 CCS / 2 GBT / I CCS+ I CHAdeMO / I CCS+ I GBT		
Charging connector capacity  Cable re-tractors and the charging status RGB light	Charging connector capacity	Cable re-tractors and the charging status RGB light		