

### Product Introduction

CEG1K0100G2 is specially designed for DC input type EV DC fast charger. It has high efficiency, low fan noise, high power density and high reliability advantage. Up to 880V DC input and output voltage range is from 150 to 1000VDC with 30kW output power, EMC/EMI satisfy TUV CE certification with class B level, and safety satisfy TUV CE and US certification. Also, this power converter support the Solar panel's DC power input with MPPT function.

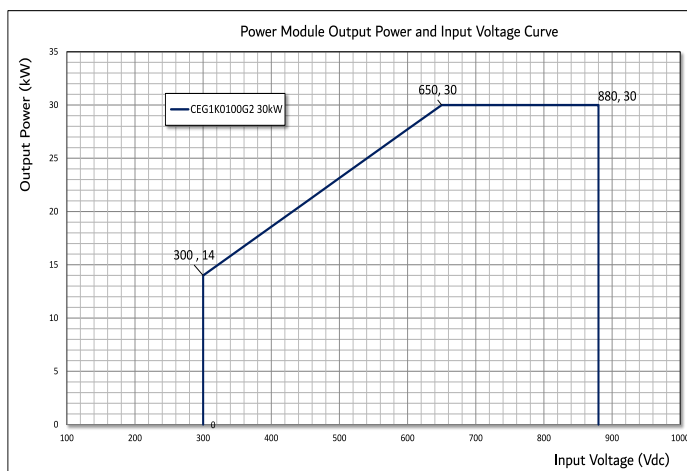
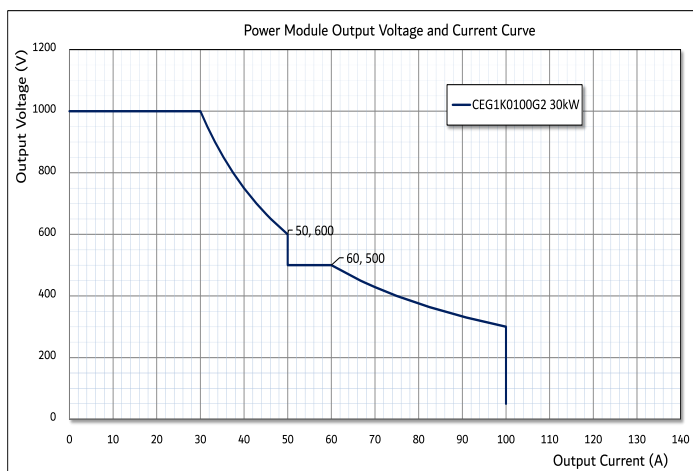


### Main feature :

- Inside high frequency transformer isolation
- Full hot plug design
- TUV CE, US Certification, EMC class B level
- Glue Filling, Conformal coating and special protection technology for high protection to improve the reliability
- Wide output voltage range, 150-1000VDC, suitable for a wide range of EVs
- Max 100A Constant current for higher output power at low output voltage
- Super denoise mode can achieve less than 60 dB fan audio noise
- An internal patented intelligent discharge circuit automatically discharges residual charge, simplifying system designs
- The ESTOP function can lower the output voltage to less than 60V in 300ms
- Wide input DC voltage from 300V to 880V DC
- MPPT function to support the solar power DC input
- Wide operating temperature range, -40°C-- +75°C
- Compatible in size and interface with the ACDC, Bidirectional ACDC and Bidi DCDC Power Module
- Normal standby power consumption with 12W and Super low standby power consumption with 3W

### Application :

- DC input EV DC Fast charger
- Energy storage charger for the battery discharge
- Solar power converter
- DC Bus industrial application



## Technical Specification

Environment	Ambient Temperature	-40°C ~ +75°C, Power derating from 55°C
	Storage Temperature	-40°C ~ +70°C
	Humidity	≤95%RH, non-condensing
	Cooling	Fan cooling
	Altitude	2000m
Input Side	Input Voltage range	300Vdc ~ 880Vdc
	Max Input current	49A@650Vdc
	Efficiency	≥96%@400-500Vdc/800-1000Vdc/50%~100% load, Max point ≥96.5%@1000V100A,
PV input	MPPT function support	Maximum power point tracking to maximize solar energy efficiency
	PV panel group voltage in series	300Vdc ~ 880Vdc
	Alarm and protection	Over voltage and low voltage alarm with shut down protection
	Parallel work	Support max 4 DC2DC working in parallel
Output Side	Output power	30kW@ voltage >300Vdc
	Voltage range	150Vdc ~ 1000Vdc
	Current range	0~100A
	Current sharing	< ±1 A
	Voltage Stabilization accuracy	< ±0.5%
	Current Stabilization accuracy	≤±1% (output power in 20% ~ 100%)
	Stand by power consumption	< 12W
Control	Communication	CAN bus, Max 36 power modules parallel
	Indication Light	Green LED: normal operation Yellow LED: alarm Red LED: failure
	Address Indication	Automatic address identification, Panel dial switch for group setting
	Noise Setting	Power mode with max 75 dB, Denoise mode with max 70 dB, Quiet mode with max 60 dB
	ESTOP/Super Standby	Quickly stop output less than 60V in 300ms. Outerside 12V DO control
Alarm and protection	Input/output voltage protection	Over/under volt protection with automatic shutdown/restart when the volt returns to normal
	Over current/short circuit protection	Automatic shutdown and lock, power off to start and unlock
	Over temperature protection	Automatic shutdown, automatic restart when the temperature returns to normal
EMC/EMI	TUV CE certification	EN61851-21-2, class B
Safety	TUV US/CE certification	UL2202, EN61851-1, EN61851-23
Reliability	MTBF	>300,000 h
Mechanical	Dimension	84mm (H) × 300mm (W) × 395mm (D)
	Weight	≤16 kg
Ordering Information	Type	CEG1K0100G2 for charger power module, CEG1K0100P2 for MPPT converter

