- Closed procedure for using "MANU BYPASS":
  - ① Open "MANU BYPASS" breaker, take out the lock of "AC OUTPUT" breaker, at the same tine, lock the "MANU BYPASS" breaker(non-closing this breaker).
  - ② Close "AC INPUT"、"DC INPUT"、"PV INPUT" and "AC OUTPUT" breaker, turn on the UPS or inverter.

## Warning!



Normally, closing the breaker of the machine and opening the machine is acceptable, when machine is failure, operation must with the professional engineer's help in order to be safe.

## **6** Specifications

Model		GF100	GF500		GF800	GF1000		GF1500	GF2000	GF2400
Power		100W	500W		800W	1000W		1500W	2000W	2400W
	12Vdc	12Vdc	24Vdc	24Vdc	24Vdc	48Vdc	48Vdc			
Working mode		PV(Photovoltaic priority) / AC(AC priority)Optional								
PV	Input voltage range	12Vdc 25Vdc		24Vdc 45Vdc			48Vdc 90Vdc			
	PV panels configuration(Suggestion) (Vmp)	15Vdc 17.8Vdc		30Vdc 36Vdc			60Vdc 71Vdc			
	PV panels configuration(Suggestion) (Imp≤rated current)	≤20A	≤40 <i>k</i>		λ.	≪!	50A	≤60A	≤80A	
	Max charge current	5-20A Optional	10-40A Ontion				al 10-60A Optional			
	Max transfer efficiency	98 %								
Display	Display panel	LCD + LED								
Mains status (option)	Input voltage range	165Vac-275Vac / 150Vac-275Vac (customized)								
	Input frequency range	45-65 Hz (over this range transfer to inverter model auto.)								
	Output voltage range	220Vac ± 10%								
	MAX Input PF (AC/DC)	98%								
	MAX efficiency	96%								
	MAX Charge current	12A Max( battery discharge ends; Start charging when PV charge current less than the set value)								
	AC over load	110% load, after 255s, transfer to bypass, 120% load ,after 60s transfer to bypass, 150% load, after 10s, transfer to bypass, auto recover after decrease load								
	Short circuit	Input fuse / breaker								

Selection of the wire diameter		UT(mm²) PUT(mm²)		≥1		≥1.5			≥2. 5			
		UT(mm²) UT(mm²)	≥4	≥12	≥6	≥10	≥12	≥6	≥10	≥12	≥12	
Inverter Output	Output	voltage					220Vac	± 5%				
	Output f	50Hz / 60Hz ± 1% Auto.										
	Outp	out PF	≥0.8									
	Disto	ortion	Line load≤5%									
	PV-AC tra	ansfer time	5Ms typical value						1ax.8 Ms			
	Max ef	fficiency	84.5%									
	Inverter	overload	110% load 255s shut down, 120% load 60s shut down, 150% load 10s shut down							n,		
	No load of	f (Optional)	Load < 5% after 1min , transfer to bypass mode									
	Short	circuit	System Shut down automatically									
	AC ab	Beeping 1time/4S, 40Ssilence auto.										
Alarm	Batte	Beeping 1time/ 0.2S										
Aldilli	Ove	1time/ 1S										
Comr	Communication port (optional)			RS232 / USB / SNMP (Setup available for regular start/shutoff)								
Dry contact			PV failure、battery low-voltage、overload、bypass、inverter failure/ remote start generator dry contact signal									
	Output sockets		RS232/USB/SNMP(Setup available for regular start/shutoff)									
	Surge protection		Optional									
	EMC		EN62040-2:2006;EA61000-3-2:2006; EA61000-3-3:2008									
	IP class		IP20									
	Ambient temperature		0℃ ~ 40℃									
Others	Ambient humidity		10% $\sim$ 90% (Non Condensed)									
Outers	Noise		≤50dB									
	Working altitude		2000m (Every 100m increase derating 1%)									
	Inverter Size D*W*H (MM)	Wall-mounted	314>	<147×4	56			38	30×195×4	78		
		Outdoor	545×245×900 / 545×460×900									
	Packing Size	Wall-mounted	380×190×500 455×255×522									
	D*W*H (MM)	Outdoor	605×320×975 / 605×535×975									



## Note!

the solar panel power configuration is related with the inverter working mode and charging current, we suggest match the PV power according to project needs.