



ON/OFF GRID SOLAR INVERTER

FR 10.2KW SERIES



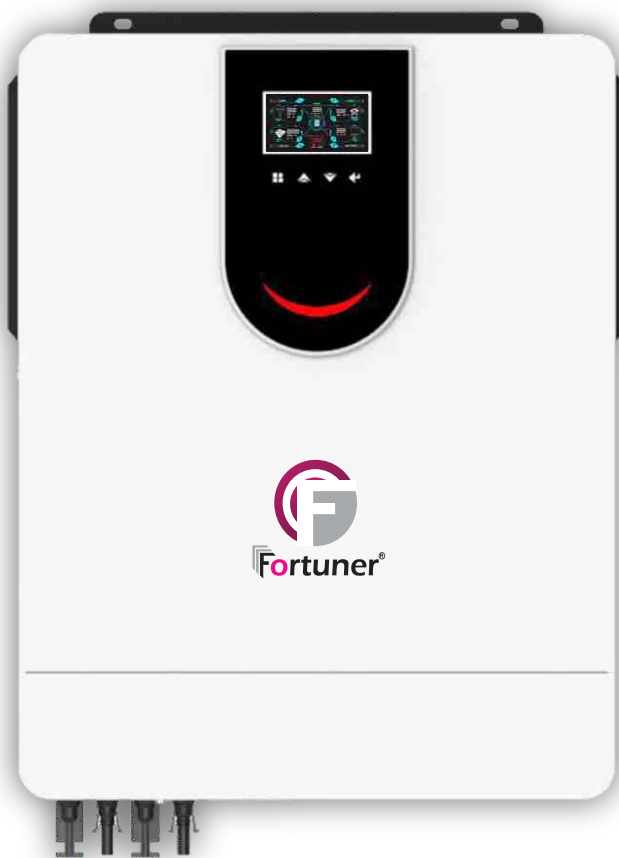
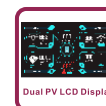
INVERTER MODE



PV MODE



UTILITY MODE

160A
MAX PV
CHARGING

»» Features

- Pure sine wave solar inverter(on/off Grid)
- Output power factor 1.0
- WIFI&GPRS available for IOS and Android
- Inverter can run without battery
- One-key restoration to factory Settings
- Built-in Lithium battery automatic activation
- Built-in 160A MPPT solar charger (for 8.2kw,10.2kw)
- Dual communication ports for Battery communication and Wifi communication
- High PV input voltage range(90~ 500VDC)
- Built-in anti-dust kit for harsh environment
- Smart battery charge design to optimize battery life
- Dual output
- Dual PV input
- Touch button
- On Off Grid Work Mode

»» Product Data Sheet

MODEL	FR -8.2KW-48V	FR -10.2KW-48V
Phase	1-phase	
Maximum PV Input Power	5400W+5400W	
Rated Output Power	8200W/8200VA	10200W/10200VA
Maximum Solar Charging Current	160A	
GRID-TIE OPERATION		
PV INPUT (DC)		
Nominal DC Voltage/Maximum DC Voltage	360/500VDC	
Start-up Voltage / Initial Feeding Voltage	90VDC/120VDC	
MPPT Voltage Range	90~450VDC	
Maximum Input Current	2/18A	
GRID OUTPUT (AC)		
Nominal Output Voltage	220/230/240VAC	
Output Voltage Range	195~253VAC	
Nominal Output Current	35.6A	44.3A
Power Factor	>0.99	
EFFICIENCY		
Maximum Conversion Efficiency (DC/AC)	98%	
TWO LOAD OUTPUT POWER		
Full Load	8200W	10200W
Maxium Main Load	8200W	10200W
Maxium Second Load(battery mode)	2733W	3400W
Maxium Load Cut Off Voltage	52VDC	
Maxium Load Return Voltage	54VDC	
OFF-GRID OPERATION		
AC INPUT		
AC Start-up Voltage / Auto Restart Voltage	120-140VAC/180VAC	
Acceptable Input Voltage Range	90-280VACor170-280VAC	
Frequency Range	59~61±1HZ	
Maximum AC Input Current	48.2A	60A
PV INPUT (DC)		
Nominal DC Voltage/Maximum DC Voltage	360/500VDC	
MPPT Voltage Range	90~450VDC	
Maximum Input Current	2/18A	
BATTERY MODE OUTPUT (AC)		
Nominal Output Voltage	220/230/240VAC	
Output Waveform	Pure sine wave	
Efficiency (DC to AC)	94%	
BATTERY & CHARGER		
Nominal DC Voltage	48VDC	
Maximum Solar Charging Current	160A	
Maximum AC Charging Current	140A	
Maximum Solar+AC Charging Current	160A	
HYBRID OPERATION		
PV INPUT (DC)		
Nominal DC Voltage/Maximum DC Voltage	360/500VDC	
Start-up Voltage / Initial Feeding Voltage	90VDC/120VDC	
MPPT Voltage Range	90~450VDC	
Maximum Input Current	2/18A	
GRID OUTPUT (AC)		
Nominal Output Voltage	220/230/240VAC	
Output Voltage Range	195~253VAC	
Nominal Output Current	35.6A	44.3A
AC INPUT		
AC Start-up Voltage / Auto Restart Voltage	120-140VAC/180VAC	
Acceptable Input Voltage Range	90-280VAC or 170-280VAC	
Maximum AC Input Current	48.2A	60A
Maximum AC Charging Current	140A	
GENERAL		
PHYSICAL		
Dimension,D*W*H(mm)	530x390x130	
Cartoon Dimension,D *W *H(mm)	620*465*205	
Net Weight (kgs)	14.2	14.7
Gross Weight(kgs)	15.7	16.2
INTERACE		
Communication Port	RS232/RS485/WIFI/GPRS/LITHIUM BATTERY	
ENVIRONMENT		
Humidity	5% to 95% Relative Humidity(Non~condensing)	
Operating Temperature	-10℃~50℃	
STANDARD		
Compliance Safety	CE	