

DIAMOND S E R I E S

160A
TRUE MPPT

8.5 KW 10.5 KW

DIAMOND 5G PV10000 & PV13000
ON/OFF/MKS/KS SOLAR HYBRID INVERTER



KEY SALIENT FEATURES

- ✓ Introducing 1st Time In Pakistan Real 5th Gen Inverter, Supporting high efficiency Mosfet, Chopper with bigger size
- ✓ DIAMOND Series Inverter supports Multiple operation modes (ON/OFF/MKS/KS)
- ✓ 100% Pure Sine Wave Solar Inverter
- ✓ Output power factor 1.0
- ✓ Optional Wi-Fi available for IOS/Android devices
- ✓ Inverter running with battery & without battery
- ✓ 1 button restore setting options in program (00)
- ✓ Battery equalizations in program (30)
- ✓ Record fault code feature in program (25)
- ✓ Adaptable to main Voltage / generator power
- ✓ Conformal coating to prevent from dust and humidity
- ✓ Built-in automatic electronics breaker for overload & short circuit protection
- ✓ New Color Screen LCD function design with touch buttons
- ✓ Built-in anti dust for harsh environment
- ✓ Compatible with all kinds of Lithium Batteries
- ✓ 98% Real time sharing
- ✓ Overload Protection on 120% Load
- ✓ Surge Capacity 2* Rated Power for 5 Seconds
- ✓ Battery charging current upto 300A (AC+Solar)
- ✓ MPPT Based Solar Charge Controller (160A)
- ✓ High PV input voltage range (90~550 VDC)
- ✓ Two output for normal and heavy load
- ✓ Maximum input current 27A
- ✓ Multiple operation modes (On Grid / Of Grid / Hybrid)
- ✓ Grid-Tied net metering feature with 100% reverse grid feeding
- ✓ Builtin Zero export
- ✓ Two PV input parallel based MPPT controller for PV10000 & PV13000
- ✓ Designed and Engineered in Taiwan



RGB LIGHTING
To highlight modes
(Charging/Output/Input)



WI-FI DEVICE
OPTIONAL



DIAMOND S E R I E S

PRODUCT DATA SHEET

| MODEL | DIAMOND 5G - PV10000 | DIAMOND 5G - PV13000 |
|---|---------------------------|----------------------|
| Phase | 1-Phase | |
| Maximum PV Input Power | 10000 W | 13000 W |
| Rated Output Power | 8500 W | 10500 W |
| Maximum Solar Charging Current | 160 A | 160 A |
| GRID-TIE OPERATION | | |
| PV Input(DC) | | |
| Nominal DC Voltage/Maximum DC Voltage | 360 VDC/500 VDC | |
| Start-up Voltage/Initial Feeding Voltage | 90 VDC/120 VDC | |
| Maximum DC Voltage | 90~450 VDC | |
| Number of MPPT Trackers/Maximum Input Current | 27A | |
| GRID OUTPUT(AC) | | |
| Nominal Output Voltage | 220/230/240 VAC | |
| Output Voltage Range | 195.5-253 VAC | |
| Nominal Output Current | 38A | 47 A |
| Power Factor | >0.99 | |
| Feed-in Grid Frequency Range | 49~51 Hz | |
| EFFICIENCY | | |
| Maximum Conversion Efficiency(Soar to AC) | 98% | |
| TWO LOAD OUTPUT POWER(V2.0) | | |
| Full Load | 8500 W | 10500 W |
| Maximum Main Load | 8500 W | 10500 W |
| Maximum Second Load(battery mode) | 2833 W | 3500 W |
| Main Load Cut Off Voltage | 44 VDC | 44 VDC |
| Main Load Return Voltage | 54 VDC | 54 VDC |
| OFF-GRID OPERATION | | |
| AC INPUT | | |
| AC Start-up Voltage/Auto Restart Voltage | 120-140 VAC/180 VAC | |
| Acceptable Input Voltage Range | 90-280 VAC or 170-280 VAC | |
| Maximum AC Input Current | 40 A | 50 A |
| Nominal operating frequency | 50/60Hz | |
| Surge power | 17000W | 21000 W |
| BATTERY MODE OUTPUT(AC) | | |
| Nominal Output Voltage | 220/230/240 VAC | |
| Output Waveform | PURE SINE WAVE | |
| Efficiency(DC to AC) | 94% | |
| BATTERY & CHARGER | | |
| Nominal DC Voltage | 48 VDC | 48 VDC |
| Maximum Charging Current (Solar to AC) | 160A | 160 A |
| Maximum AC Charging Current | 140A | |
| GENERAL | | |
| PHYSICAL | | |
| Dimension,D x W X H(mm) | 420*310*110 | |
| Net Weight(kgs) | 14.2 | 14.5 |
| INTERFACE | | |
| Communication Port | RS232/WI-FI/GPRS | |
| ENVIRONMENT | | |
| Operating Temperature | -10~50 C | |

Note: Product specifications are subject to change without further notice



LED STATUS
INDICATION



POWER
FACTOR 1.0



100%
REVERSE
GRID FEEDING



27A
MAX INPUT
CURRENT



LITHIUM BATTERY
COMPATIBLE



MULTIPLE
MODES



TOUCH BUTTON
SCREEN



WI-FI
OPTIONAL