03 HYBRID INVERTER

• Single-phase Hybrid Inverter

• Features & Advantages

- Support Time-of-use Optimization
- AFCI (Optional) & Rapid Shutdown Ready
- 100% unbalanced output, each phase;
  200% unbalanced output, each phase (Below 10kW)
- Configurable Operation Modes
- Build-in Anti-feed-in Function
- Smart Monitoring & Remote Firmware Upgrade

• Technical Specifications

PV Input	Ares 3.6KL	Ares 5KL	Ares 6KL
Max. Input Power	5.4kW	7.5kW	9.0kW
Max. PV Voltage		550V	
MPPT Range		80 - 500V	
Full MPPT Range	110 - 500V	150 - 500V	170 - 500V
Normal Voltage		360V	
Startup Voltage		100V	
Max. Input Current		18.5 x 2A	
Max. Short Current		26 x 2A	
No.of MPP Tracker/No. of PV String		2 / 2	
Battery Port			
Max. Charge/Discharge Power	3.6kw	4.8kw	4.8kw
Max. Charge/Discharge Current		80A	
Battery Normal Voltage		51.2V	
Battery Voltage Range		40 - 60V	
Battery Type		Li-ion / Lead-acid etc.	
AC Grid			
Max Continuous Current	17.0A	23.0A	28.0A
Max Continuous Power	3.6kVA	5.0kVA	6.0kVA
Nominal Grid Current	16.4/15.7A	22.8 / 21.8A	27.3 / 26.1A
Nominal Grid Voltage		198 to 242 @ 220 / 207 to 253 @ 230V	
Nominal Grid Frequency		50 / 60 Hz	
Power Factor		0.999 (Adjustable from 0.8 overexcited to 0.8 underexcited)	
Current THD		< 3%	
AC Load Output			
Max Continuous Current	17.0A	23.0A	28.0A
Max Continuous Power	3.6kVA	5.0kVA	6.0kVA
Max Peak Current (10min)	24.6/23.5A	34.1 / 32.7A	41.0 / 39.2A
Max Peak Power(10min)	5.4kVA	7.5kVA	9.0kVA
Nominal AC Current	16.4 / 15.7A	22.8 / 21.8A	27.3 / 26.1A
Nominal AC Voltage L-N		220/230V	
Nominal AC Frequency		50/60Hz	
Switching Time		Seamless s	
Voltage THD		< 3%	
Efficiency			
CEC Efficiency		97.0%	
Max. Efficiency		97.6%	
PV to Bat. Efficiency		98.1%	
Bat. between AC Efficiency		96.8%	
Protection			
PV Reverse Polarity Protection		Yes	
Over Current/Voltage Protection		Yes	
Anti-Islanding Protection		Yes	
AC Short Circuit Protection		Yes	
Residual Current Detection		Yes	
Ground Fault Monitoring		Yes	
Insulation Resister Detection		Yes	
PV Arc Detection		Yes	
Enclosure Protect Level		IP65/NEMA4X	
General Data			
Dimensions		370 x 535 x 192mm	
Weight	18.5kg	20.5kg	
Topology		Transformerless	
Cooling		Intelligent Fan	
Relatively Humidity		0 - 100%	
Operating Temperature Range		-25 to 60℃	
Operating Altitude		< 4000m	
Noise Emission		<25dB	
Standby Consumption		<10W	
Mounting		Wall Bracket	
Communication with RSD		SUNSPEC	
Display & Communication Interfaces		LCD, LED, RS485, CAN, Wi-Fi, GPRS, 4G	
Certification & Approvals		NRS097, G98/G99, EN50549-1, C10/C11, AS4777.2, VDE-AR-N4105, VDE0126, IEC62109-1, IEC62109-2	
EMC		EN61000-6-2, EN61000-6-3	