

MODEL	SHIELD-6K	SHIELD-6K-KS*	SHIELD-10K-11	SHIELD-10K-11-KS*
Power	6 kVA / 6 kW		10 kVA / 10 kW	
<b>MAIN INPUT</b>				
Grid system	1 Phase + Neutral + Ground			
Rated voltage / Frequency	230VAC, 50/60 Hz			
Voltage range	110~288 VAC (derating with main <176 VAC)			
Rating (nominal input voltage)	30 A	34 A	49 A	53 A
Frequency range	40~70Hz (rectifier operating range)			
Power factor	>0.99			
Current THDi	<4%			
<b>OUTPUT</b>				
Rated voltage / Frequency	220/230/240 VAC, 50/60 Hz (110 VAC version available upon request)			
Power Factor	1			
Wave form	Pure sine wave			
Voltage THDv	≤1% (linear load); ≤5% (non-linear load)			
Voltage precision	±1% (0-100% linear load)			
Transient recovery	Compliant to EN62040-3 VFI-111 Standard			
Inverter overload	105-110%, 10 minutes 110-125%, 1 minute 125-150%, 30 seconds			
Bypass overload	100-125% long term operation 125-130%, 5 minutes 130-150%, 1 minute >150%, 200 milliseconds			
Frequency regulation	50/60 Hz ±0.1%			
Synchronized range	Selectable, default ±5 Hz			
Synchronized slew rate	Selectable (1 Hz/S ~ 5 Hz/S)			
Crest factor	3:1			
<b>BATTERIES</b>				
Battery type	Pb			
Battery capacity	12 V / 7 Ah	Selectable	12 V / 9 Ah	Selectable
Number of batteries in series	16 (standard)			
Battery range	From 16 to 20	From 16 to 24	From 16 to 20	From 16 to 24
Battery rate voltage	192 / 240 VDC	192 / 288 VDC	192 / 240 VDC	192 / 288 VDC
Backup time	50% load: up to 12 minutes 75% load: up to 7 minutes 100% load: up to 3.5 minutes	Depending on external batteries capacity	50% load: up to 8 minutes 75% load: up to 4 minutes 100% load: up to 1.5 minutes	Depending on external batteries capacity
<b>BATTERY CHARGER</b>				
Charging voltage	2.25 V/cell default (settable)			
Charging current	1 A	5 A (settable)	1 A	5 A (settable)
Charging time	8 h to recover 80% capacity	Depending on external batteries capacity	8 h to recover 80% capacity	Depending on external batteries capacity
<b>SYSTEM</b>				
Efficiency	Normal operation: 95% Battery operation: 94.6% Eco Mode operation: 98%			
Display	LED + LCD			
Protection degree	IP20			
Interface	Standard equipment: RS232, USB, Cold Start, EPO Optional: RS485, SNMP, dry contacts, parallel kit			
<b>ENVIRONMENT</b>				
Operating temperature	0 ~ 40°C			
Storage temperature	-20 ~ 70°C			
Relative humidity	0 ~ 95% (no condensing)			
Noise (dBA at 1 meter far)	< 58			
Altitude	<1000m; load derated 1% per 100m, from 1000 ~ 5000m			
<b>MECHANICAL DATA</b>				
Dimensions W*D*H (mm)	190*525*705			
Weight (Kg)	56	15	60	17
Color	Black			

Note: technical specifications and data could be changed without notification

Note 2: it is available upon request the SHIELD-RC version, which complies with CEI 0-16 requirements for MV/LV transformer substations

\* KS denotes the UPS version with increased battery charger and no internal batteries. These versions are available upon specific request