







# Hybrid Inverter



## APEX-E-P1-3.6/5/6/7.6/8KL

-  Colorful touch LCD, IP65 protection degree
-  DC couple and AC couple to retrofit existing solar system
-  Max.16 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
-  Max.charging/discharging current of 190A
-  6 time periods for battery charging/discharging
-  Support storing energy from diesel generator

## Technical Data

Model	APEX-E -P1-3.6KL	APEX-E -P1-5KL	APEX-E -P1-6KL	APEX-E -P1-7.6KL	APEX-E -P1-8KL
<b>Battery Input Data</b>					
Battery Type	Lead-acid or Li-Ion				
Battery Voltage Range (V)	40~60				
Max. Charging Current (A)	90	120	135	190	190
Max. Discharging Current (A)	90	120	135	190	190
External Temperature Sensor	Yes				
Charging Curve	3 Stages / Equalization				
Charging Strategy for Li-Ion Battery	Self-adaption to BMS				
<b>PV String Input Data</b>					
Max. DC Input Power (W)	4680	6500	7800	9880	10400
Rated PV Input Voltage (V)	370 (125~500)				
Start-up Voltage (V)	125				
MPPT Voltage Range (V)	150-425				
Full Load DC Voltage Range (V)	300-425			200-425	
PV Input Current (A)	13+13			26+26	
Max. PV I <sub>SC</sub> (A)	17+17			34+34	
No.of MPP Trackers	2				
No.of Strings per MPP Tracker	1		2		
<b>AC Output Data</b>					
Rated AC Output and UPS Power (W)	3600	5000	6000	7600	8000
Max. AC Output Power (W)	3690	5500	6600	8360	8800
AC Output Rated Current (A)	16.4/15.7	22.7/21.7	27.3/26.1	34.5/33	36.4/34.8
Max. AC Current (A)	18/17.2	25/23.9	30/28.7	38/36.3	40/38.3
Max. Continuous AC Passthrough (A)	35		40	50	
Peak Power (off grid)	2 time of rated power, 10 S				
Power Factor	0.8 leading to 0.8 lagging				
Output Frequency and Voltage	50/60Hz; L/N/PE 220/230Vac (single phase)				
Grid Type	Single Phase				
DC injection current (mA)	THD<3% (Linear load<1.5%)				
<b>Efficiency</b>					
Max. Efficiency	97.60%				
Euro Efficiency	96.50%				
MPPT Efficiency	99.90%				
<b>Protection</b>					
Integrated	PV Input Lightning Protection, Anti-islanding Protection, PV String Input Reverse Polarity Protection, Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Output Shorted Protection, Surge protection				
Output Over Voltage Protection	DC Type II/AC Type III				
<b>Certifications and Standards</b>					
Grid Regulation	VDE4105, IEC61727/62116, VDE0126, AS4777.2, CEI 0 21, EN50549-1, G98, G99, C10-11, UNE217002, NBR16149/NBR16150				
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2				
<b>General Data</b>					
Operating Temperature Range (°C)	-40~60°C, >45°C derating				
Cooling	Natural cooling				
Noise (dB)	<30 dB				
Communication with BMS	RS485; CAN				
Weight (kg)	24				
Size (mm)	330W x 580H x 232D				
Protection Degree	IP65				
Installation Style	Wall-mounted				
Warranty	5 years				