



AQUILA POWER

AQUILA POWER [AP SERIES] OFF GRID SPS INVERTER TECHNICAL SPECIFICATIONS				
FUNCTIONAL PARAMETERS		AP SERIES MODEL NUMBERS		
		AP20	AP25	AP30
General Inverter Description		AP Series Renewable Energy Off Grid (SPS) Inverters provide continuous AC power generation from multiple DC input sources in Domestic, Rural, Commercial and Industrial applications		
Mechanical and Isolation Protection	Equipment Classification	Class 1		
	Ingress Protection [IP]	IP 20		
	Inverter Isolation Type	The inverter is Isolated between Input and Output circuits		
	Safety Standards	Certified IAW IEC 62109.1 - IEC 62109.2		
DC Power Input	Rated Power (kVA)	21.82 kVA	27.80 kVA	33.00 kVA
	Operating DC Input Range (V _{RANGE})	352 - 705 (VDC)		
	Maximum DC Input Voltage (V _{MAX})	750 (VDC)		
	Maximum DC Input Current (I _{MAX})	62.0 Amps	79.0 Amps	94.0 Amps
	Solar PV Short Circuit Current (I _{sc})	62.0 Amps	79.0 Amps	94.0 Amps
	DC Input (suitable power sources)	Any continuous or intermittent DC input power source within the DC Input Voltage range, with < 10% RMS ripple is acceptable		
AC Power Output	Apparent Power (kVA)	20.00 kVA	25.00 kVA	30.00 kVA
	Rated Power (kVA)	20.00 kVA	25.00 kVA	30.00 kVA
	Real Power (kW)	16.00 kW	20.00 kW	24.00 kW
	Power Factor (PF)	0.8 - 1.0 (Typical Reactive load 0.8 - Resistive load 1.0)		
	Voltage (VAC) and Phases (ϕ)	1 Phase ϕ - 230 VAC +/- 3%		
	Frequency (Hz)	50 Hz +/- 0.5 Hz		
	Rated Output Current (A)	86.9 Amps	108.7 Amps	134.4 Amps
	Waveform Distortion THD (%)	< 5.0 % (Linear load)		
	Dynamic Load Response (%)	< 5.0% (Lagging for linear load from 0% to 100%)		
	Overload Power Capability (%)	150% (of Rated Power for 10 Seconds)		
	Efficiency Indicative (%)	> 90% (at 80% Resistive load)		
	Conversion Response DC→AC (%)	< 20.0 ms		
	Display Type	LCD (Scrolling menu buttons)		
Operating Environment	Insulation (Input↔Output) (VAC)	3000 (VAC) (Applied dielectric insulation test voltage)		
	Noise (dB)	< 50 dB (at 1 metre)		
	Ambient Temperature (°C)	- 15°C to + 45°C		
	Humidity (%)	0% - 95% (no condensation)		
	Altitude (m)	< 4000 m		
Mechanical	Dimensions (mm)	830 x 450 x 1100 (mm)		
	Weight (Kgm)	260 Kgm		

Functional Protection	DC Input +/- Polarity protection	Yes
	DC Input Under-voltage protection	Yes
	DC Input Over-voltage protection	Yes
	AC Output Overload protection	Yes
	AC Output Short-circuit protection	Yes
	Over Temperature protection	Yes
Network Monitoring Connectivity	Local and Remote Data Acquisition, Control and Performance Data Display Capability	Fully featured Plug and Play Data Acquisition Monitoring and Control System and User Interface for Smart phone and Internet connection. (This system operates autonomously and external services such as Wifi are not required to be available)
Product Registration and Approval	Australian Clean Energy Regulator Australian Clean Energy Council (ERAC) Responsible Supplier	A registered and IEC safety standards approved Off Grid SPS inverter for sale and use in Australian Renewable Energy Off Grid (SPS) installations
Applicable Standards	CEC/CER Mandatory requirements for Off Grid SPS Inverters	IEC 62109.1 - IEC62109.2



Aquila Power high performance designed inverters are the perfect choice for any Off Grid (SPS) installation including, rural properties and farms, free-standing irrigation pump systems, business enterprises and factories, and domestic premises.

They are specifically designed for owners wanting a trouble free long life Off Grid inverter that simply does its job predictably and precisely without requiring any owner intervention or oversight.

AP inverters can seamlessly integrate multiple DC input power sources such as Solar PV, DC Micro Hydro and Wind, and Power Storage, to produce an uninterrupted pure sine wave AC output sufficient to power your lifestyle continuously, and without any fuss 24/7.

"Thinking Off Grid? success is in the design"

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