



## ELECTRICAL SPECIFICATIONS

Model Number		MES 6000 and MES 8000 6kW and 8kW		my Energy system		
<b>Input</b>	Nominal Voltage	240V AC				
	Voltage Range	Acceptable Voltage Range	120V -270V AC			
		Frequency	45Hz - 70Hz Auto Sensing			
	Low Voltage Transfer	Low Voltage	120V AC +/-2%			
		Low Voltage Return	130V AC +/-2%			
	High Voltage Transfer	High Voltage	270V AC +/-2%			
		High Voltage Return	260V AC +/-2%			
<b>Output</b>	Voltage	240V AC				
	Voltage Regulation	(Bat Mode)	<3% RMS for entire battery voltage range			
	Frequency Regulation	Line Mode	Synchronized to AC Main			
		Battery Mode	50Hz +/- 0.1Hz			
	Power Factor	1.0				
	Wave Form	Pure Sine wave				
	Efficiency	>88%				
	Overload Protection	Line Mode	>110%, then Buzzer Alarm and Amber LED blink continuously			
		Battery Mode	110%-150% for 30 sec; >150% for 200ms, then shuts down (Electronic shut down)			
	Short Circuit Protection	Line Mode	Circuit Breaker			
Battery Mode		Electronic Circuit				
<b>Protection</b>	Circuit breaker	Change over switch (grid/inverter) mounted externally				
<b>DC Start</b>	Cold Start	Yes				
<b>Transfer time</b>	Typical	<8 ms. Bi-directional				
<b>Battery</b>	Battery Type	Lithium-ion				
	Battery Voltage	48Vdc				
	Backup Time	Based on the batteries connected				
	Recharging Current	>30A				
<b>Control Panel</b>	LCD Colour Touch Screen 4.3"	Shows: Operational flow diagram, all parameters of system, solar generation kW, house consumption kW, power to grid and time schedules				
	LED Display	On Mains (Green), On Battery (Amber), Fault (Red)				
<b>Audible Alarm</b>	Battery Mode	Beeping every 4 seconds				
	Low Battery	Beeping every second				
	Inverter Fault	Beeping continuously				
	Overload	Beeping twice per second				
<b>Parameter Re-settable</b>	Voltage, Frequency, 5 Step Charge current					
<b>Environment</b>	Operation Temperature	0-45 degree C				
	Relative Humidity	0-75% non-condensing				
	Audible Noise	Less than 55dBA (at 1M)				
<b>Physical</b>	Floor standing (W*H*D)mm	415*600*260 indoors only (IP20)				
	Weight (Kgs)	50 and 55Kg				
	Approvals	EN62040-1-1, AS 3000, AS 3100:2009, CEC				
	EMC	EN62040-2				
	Marks	CE				
<b>Solar Regulator</b>						
Solar Input Power 2.5kW 50A 48V (range 48V – 76V)						
External Solar regulators: each Regulator rated at 2.5kW 48V 50A= 5kW total. Two inputs provided on systems (Anderson Plug)						
<b>Batteries Packs</b>						
<b>Battery Pack (External):</b> Lithium-Ion Battery Pack (stackable boxes) (other options available).						
Dimensions of each box 560W x 650D x 490H(mm)						
Weight with 8kW/h Lithium-ion batteries is 132kg						
<b>Supplying load:</b> Standard lithium pack 8kW/h, (other options available for longer backup times)						
Recharge time by solar > 3 hours. (depending on solar array installed).						
By Grid Power > 8 hours.						