



# Sigen Energy Controller

3.0 – 6.0 kW Single Phase

- EMS inside for precise control
- On & off-grid compatibility
- DC ground-fault protection
- DC/AC ratio up to 2
- Multi-source black start
- IP66 protection rating

# Sigen Energy Controller 3.0–6.0 kW Single Phase

SigenStor EC	3.0 SP	3.6 SP	4.0 SP	4.6 SP	5.0 SP	6.0 SP	Units
<b>DC Input (from PV)</b>							
Max. PV power	6000	7360	8000	9200	10000	12000	W
Max. DC input voltage			600				V
Nominal DC input voltage			350				V
Start-up voltage			100				V
MPPT voltage range			50 ~ 550				V
Number of MPP trackers			2				
Number of PV strings per MPPT			1				
Max. input current per MPPT			16				A
Max. short-circuit current per MPPT			20				A
<b>AC Output (on-grid)</b>							
Nominal output power	3000	3680	4000	4600	5000	6000	W
Max. output apparent power	3300	3680	4400	5000	5500	6600	VA
Nominal output current	13.6	16.0	18.2	20.9	22.7	27.3	A
Max. output current	15.0	16.0	20.0	22.7	25.0	30.0	A
Nominal output voltage			220 / 230 / 240				V
Nominal grid frequency			50 / 60				Hz
Power factor			0.8 leading ~ 0.8 lagging				
Total current harmonic distortion			THDi < 2%				
<b>Efficiency</b>							
Max. efficiency			98.0%				
European efficiency	97.0%	97.1%	97.2%	97.3%	97.4%	97.4%	
<b>AC Output (backup)</b>							
Peak output power (10 seconds)	4500	5520	6000	6900	7500	9000	W
Nominal output voltage			220 / 230 / 240				V
Nominal output frequency			50 / 60				Hz
Power factor			0.8 leading ~ 0.8 lagging				
Total voltage harmonic distortion			THDv < 2%				
Switch time to backup mode			5*				ms
<b>Battery Connection</b>							
Battery module models			SigenStor BAT 5.0 / 8.0				
Number of modules per controller			1 ~ 6				pcs
Battery module voltage range			300 ~ 600				V
<b>General Data</b>							
Dimensions (W / H / D)			700 / 300 / 245				mm
Weight			18				kg
Storage temperature range			-40 ~ 70				°C
Operating temperature range			-30 ~ 60				°C
Relative humidity range			0% ~ 95%				
Max. operating altitude			4000				m
Cooling			Natural convection				
Ingress protection rating			IP66				
Noise emission			< 30				dB

\* Need to be used together with Sigen Energy Gateway + Sigen Battery.

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