



Sigen Energy Controller

5.0 – 12.0 kW

Three Phase Low Voltage

- EMS inside for precise control
- DC ground-fault protection
- Multi-source black start
- DC/AC ratio up to 1.6
- IP66 system protection rating

Signen Energy Controller 5.0–12.0 kW Three Phase Low Voltage *Preliminary*

SignenStor EC	5.0 TPLV	6.0 TPLV	8.0 TPLV	10.0 TPLV	12.0 TPLV	Units
DC Input (from PV)						
Max. PV power	8000	9600	12800	16000	19200	W
Max. DC input voltage			600			V
Nominal DC input voltage			360			V
Start-up voltage			180			V
MPPT voltage range			160 ~ 550			V
Number of MPP. trackers	2	2	3	3	4	
Number of PV strings per MPPT			1			
Max. input current per MPPT			16			A
Max. short-circuit current per MPPT			20			A
AC Output (on-grid)						
Nominal output power	5000	6000	8000	10000	12000	W
Max. output apparent power	5500	6600	8800	11000	13200	VA
Nominal output current	13.2	15.8	21.0	26.2	31.5	A
Max. output current	14.5	17.4	23.1	28.9	34.7	A
Nominal output voltage			133 / 230, 127 / 220			V
Nominal grid frequency			50 / 60			Hz
Power factor			0.8 leading ~ 0.8 lagging			
Total current harmonic distortion			THDi < 2%			
Efficiency						
Max. efficiency			98.0%			
European efficiency			97.5%			
Battery Connection						
Battery module models			SignenStor BAT 5.0 / 8.0			
Number of modules per controller			1 ~ 6			pcs
Battery module voltage range			300 ~ 600			V
Protection						
Safety protection feature			DC ground fault protection, Arc fault circuit interrupter, DC reverse polarity protection, Anti-islanding protection, AC overcurrent/overvoltage/short-circuit protection, Insulation monitoring, Residual current monitoring, DC/AC surge protection			
General Data						
Dimensions (W / H / D)			700 / 300 / 260			mm
Weight			36			kg
Storage temperature range			-40 ~ 70			°C
Operating temperature range			-30 ~ 60			°C
Relative humidity range			0% ~ 95%			
Max. operating altitude			4000			m
Cooling			Smart air cooling			
System ingress protection rating			IP66			
Communication			WLAN / Fast Ethernet / RS485 / Signen CommMod (4G/3G/2G)			