IGNACORE

Energy Storage System
Model-ComCore-20/20

20 kW/ 20 kWh

WHY CHOOSE **IGNACORE?**

- **Uninterruptible Supply:** Instantly delivers power (within <10ms) during grid or genset failure, preventing production downtime and equipment damage.
- **Diesel Generator Reduction:** Significantly reduces diesel genset runtime, leading to major savings on fuel costs, O&M expenses, and generator wear & tear
- **Peak Load Shaving:** Discharges during high tariff hours or peak demand, reducing demand charges and avoiding penalties for exceeding contract demand.
- **Renewable Integration Ready:** Enables smooth integration of future (or existing) rooftop or ground-mounted solar PV, storing excess solar for use after sunset.
- **Improved Power Quality:** BESS stabilizes voltage and frequency, and filters out harmonics, protecting sensitive equipment and improving overall power quality.
- **Intelligent Power Management:** BESS can be programmed to optimize dispatch between grid, solar, and gensets, ensuring cost-effective and reliable energy use.

Email: info@ignacore.com

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Capacity-20kW/20kWh	
Battery Input Data	
Battery type	LiFePO4 (SEMI-SOLID-STATE)
Cell Configuration	1P*64S
Battery pack	4 X (100A, 51.2V)
Battery Capaciy	20kWh
Nominal DC Voltage (V)	204.8V
Rated Charge & Discharge rate	0.5C & 1C
Cooling Mode	Smart Air-cooling
Life cycle	10,000
Lifespan	Designed for 20+ years
Charging time	1.34 Hours

Inverter Brand	Deye
Inverter Model	SUN-20k-SG01HP3-EU-AM2
Battery Input Data	
Battery Type	Lithium-ion
Battery Voltage Range (V)	160-700
Max. Charging Current (A)	37
Max. Discharging Current (A)	37
Number of Battery Input	1
Charging Strategy for Li-Ion Battery	Self-adaption to BMS
PV String Input Data	
Max. DC Input Power (W)	26000
Max. DC Input Voltage (V)	1000
Rated DC Input Voltage (V)	600
Start-up Voltage (V)	180
MPPT Range (V)	150-850
Full Load DC Voltage Range (V)	500-850
PV Input Current (A)	26+26
Max. PV I_{SC} (A)	39+39
No. of MPP Trackers	2
No. of Strings per MPP Tracker	2+2
AC Output Data	
Rated AC Output Power (W)	20000
Max. AC Output Active Power (W)	22000
AC Output Rated Current (A)	30.4/29
Max. AC Output Current (A)	33.4/31.9
Max. Three-phase Unbalanced Output Current (A)	35

Max. Continuous AC Passthrough (A)	80
Peak Power (off grid)	1.5x rated power, 10s
Power Factor Adjustment Range	0.8 leading to 0.8 lagging
Rated Input/Output Voltage (V)	220/380, 230/400 0.85Un-1.1Un
Rated Grid Frequency / Range	50Hz/45-55Hz | 60Hz/55-65Hz
Grid Connection Form	3L+N+PE
Total Harmonic Distortion (THDi)	<3% of nominal power
DC Current Injection	<0.5% In
Efficiency	
Max. Efficiency	97.60%
Euro Efficiency	97.00%
MPPT Efficiency	99.90%
Protection	
Integrated	Anti-islanding, PV Reverse Polarity, Insulation Detection, Residual Current Monitor, Over Current, Short Circuit, Surge, AFCI (optional)
Over Voltage Category	DC Type II / AC Type III
Certifications and Standards	
Grid Regulation	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G99, VDE-AR-N 4105
Safety/EMC Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2
General Data	
Operating Temperature Range	-40 to +60°C (>45°C Derating)
Cooling	Smart Cooling
Noise	≤55 dB
Communication with BMS	CAN

Weight (kg)	30.5
Cabinet Size (WxHxD mm)	408×638×237 (excl. Connectors & Brackets)
Protection Degree	IP65
Installation Style	Wall-mounted

SCAN THE QR CODE TO DOWNLOAD
THE **IGNACORE** CATALOGUE

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