

**CENTAURI ENERGY SERVER
TECHNICAL DATA SHEET**

GF-2000-360Vdc-380Vac-3 | Version: October 2019

PERFORMANCE SPECIFICATIONS	MODEL	20KW
	Rated power	20 KW
	Rated current	45 A
	Output power factor	1
	Rated input voltage	380 Vac \pm 20%
	Rated output voltage	380 Vac \pm 1%
	Battery voltage	360 Vdc
	Operating mode	AC and PV complementation
	Operating temperature	0°C ~ 40°C
	Max. relative humidity	90% (non-condensing)
	Max. altitude	1000 m at rated power (derating 1% for each additional 100 m); Max. 4000 m
	Noise level at 1 m	\leq 65 dB (varies with loads and temperature)
	IP rating	IP20
PV INPUT	Max. voltage (Voc)	750 Vdc
	Optimum operating voltage (Vmp)	450 ~ 550 Vdc
	Max. conversion efficiency	\geq 98%
	Floating charge voltage (25°C)	414 Vdc \pm 1%
	Equalizing charge voltage (25°C)	428 Vdc \pm 1%
	MPPT Max. current	120 A
	Max. PV power	2 * 25 kW
	Number of PV input	2 + 1 (reserve)
	MPPT modules	2 + 1 (reserve)
AC RECTIFIER	Input voltage range	380 V \pm 20% three-phase
	Rated frequency	50 Hz / 60 Hz \pm 5 Hz (settable)
	Power factor	0.8
	Floating charge voltage (25°C)	410 V \pm 1%

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	Equalizing charge voltage (25°C)	415 V \pm 1%
	Max. charging current	38 A
INVERTER	Inverter voltage	380 Vac three-phase + N+PE
	Phase voltage	220 / 230 / 240 Vac (settable)
	Output voltage precision	\pm 1%
	Transient voltage range	\pm 5%
	Transient recovery time	20 ms
	Rated frequency	50 Hz / 60 Hz \pm 1 Hz (settable)
	Frequency tracking range	50 Hz / 60 Hz \pm 3 Hz
	Peak factor	3: 1
	Waveform	Sinusoidal
	Waveform distortion	\leq 3% (linear load)
	Voltage unbalance	\pm 3% (100% unbalanced load)
	Overload	\geq 100% ~ 150% shut down in 1 min; \geq 150% ~ 200% shut down in 10 sec; \geq 210% ~ 1000% shut down in less than 10 sec; \geq 1000% shut down in 2 s;
	Short circuit	Current-limiting, shut down immediately until the user start up
	Max. efficiency	\geq 92%
BYPASS	Rated voltage	380 Vac three-phase + N+PE
	Voltage range	\pm 20%
	Rated frequency	50 Hz / 60 Hz \pm 5 Hz
	Max. current	57 A
TRANSFER TIME	Inverter– Bypass	0 ms
	Bypass – Inverter	0 ms
COMMUNICATIONS	Remote control	Energy server startup, shutdown, abnormal clearance, EPO, battery self-test
	Communication interface	RS232, RS485, SNMP (optional)
	Dry contacts output	Bypass input abnormal, rectifier input abnormal,

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		system fault, system alarm, low battery, output overload, fan fault, generator ON / OFF
Load Handling Curve		<p>The graph shows the load handling capability over time. The y-axis represents Load% from 0 to 1000. The x-axis represents Time from 0 to 1 minute. Key points on the curve are: 1000% load at 1 second, 1000% load at 2 seconds, 200% load at 10 seconds, and a complete shutdown at 1 minute.</p>
MECHANICAL SPECIFICATIONS	Dimensions (W × D × H) (mm)	600 × 700 × 1750 mm
	Packed dimensions (W × D × H) (mm)	690 × 790 × 1850 mm
	Weight (kg)	380 kg