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KUBWA 3-10 HYBRID

ALL-IN-ONE HYBRID INVERTER

EN v2.2

DATASHEET



KUBWA 3-10 is an all-in-one off-grid & on-grid Hybrid solar inverter

- 10kW - 3 phases
- Up to 16 units in Parallel (160 kVA AC output)
- Integrate a MPPT & Charge Controller
- Works with Lithium Batteries OPIBUS KUBWA 5.1 LIBA LV
- AC Coupling & Diesel Generator Auto Start
- Smart Load Management
- Unbalanced Output Supported
- Online monitoring

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BATTERY

Battery Voltage	40 - 60 Vdc
Battery Types	Lithium & Lead Acid
Max Charging Current	210 A
Max Discharging Current	210 A
Compatibility	KUBWA LIBA 5.1 LV

AC INPUT

Max Power to Utility	20,750 W
AC Voltage	415 Vac
Output Frequency Range	50 / 60 HZ
Max Current Passthrough	50 A
AC Output Connection	3p + N + PE, Transformerless
Total Harmonic Distortion THDi	< 3% (Linear Load < 1.5%)

AC OUTPUT

Rated Output Power	10,000 W
Off-Grid / Peak Apparent Power	20,000 VA, 10 seconds
Output Voltage	415 V
Output Frequency Range	50 / 60 HZ
Rated / Max Current	15 A / 23 A
Unbalanced load capacity	100%
Automatic Switch Time	< 10 ms

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SOLAR INPUT

Max Recommended PV Array Capacity	13,000 Wp
PV Input Voltage	550 Vdc (150 – 800 Vdc)
MPPT Voltage Range	200 - 650 Vdc
Number of MPPT / String per MPPT	2 / 2
Max Input Current (Input D / E)	23 / 13 A

EFFICIENCIES

Max Efficiency	97.60%
EURO Efficiency	97.00%
MPPT Efficiency	99.90%

PHISICAL

Protection Rating	IP65
Dimensions (w – h – t)	422 – 658 – 281 mm
Net Weight	40 Kg

OPERATING ENVIRONMENT

Humidity	5 – 95% Relative Humidity (non-condensing)
Altitude	< 3000 m
Operating Temperature	-25 <> +60 °C

OTHER PROTECTIONS

DC SPD (Type II), AC SPD (Type II), PV Input Lightning Protection, Anti-islanding Protection, PV String Input Reverse Polarity Protection, Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Output Shorted Protection, Output Over Voltage Protection, Surge protection.

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MONITORING

Communication	WIFI / RS485 / CAN / GPRS External Meter + CTs
Interfaces	Smart Colour Screen, Web & Mobile apps
Uploading Interval	1 – 5 minutes

STANDARDS & SAFETY

Certification	VDE 0126-1-1 A1:2012 / VDE-AR-N 4105 / G98 / G99 / AS4777 / EN50549 / CEI 0-21
Safety	IEC62109-1 / IEC62109-2
EMC	EN 61000-6-1:2007 / EN 61000-6-2:2005 / EN 61000-6-3:2007

CERTIFICATIONS

CE, TUV

PRODUCT WARRANTY

5 years (10 years optional)

OPTIONS

Meter and CTs	For Zero Export Option
Monitoring	WIFI / GPRS
KUBWA PARALLEL BOX 3-5	Parallel Box - Up To 5 Inverters
KUBWA PARALLEL BOX 3-10	Parallel Box - Up To 10 Inverters

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