



KUBWA 60

ALL-IN-ONE HYBRID INVERTER

EN v1.0

DATASHEET



KUBWA 60 IS A VERSATILE ALL-IN-ONE OFF-GRID & ON-GRID SOLAR INVERTER

- **3 PHASES**
- **INTEGRATE A MPPT & CHARGE CONTROLLER**
- **WORKS WITH LITHIUM BATTERIES OPIBUS LIBA 3.5 HV**
- **ONLINE MONITORING**



BATTERY	
BATTERY VOLTAGE	200 - 900 VDC
BATTERY TYPES	LITHIUM IDEAL WITH 36 * LIBA 3.5 HV + MBMS
MAX CHARGING CURRENT	200 A
MAX DISCHARGING CURRENT	200 A

AC INPUT	
MAX POWER TO UTILITY	60,000 VA
AC VOLTAGE	415 VAC
OUTPUT FREQUENCY RANGE	50 / 60 HZ
MAX CURRENT	100 A
AC OUTPUT CONNECTION	3P + N + PE, TRANSFORMERLESS
TOTAL HARMONIC DISTORTION THDI	< 3%

AC OUTPUT	
RATED OUTPUT POWER	60,000 W
OUTPUT VOLTAGE	415 V
OUTPUT FREQUENCY RANGE	50 / 60 HZ
RATES CURRENT	86 A
UNBALANCED LOAD CAPACITY	100%
AUTOMATIC SWITCH TIME	< 20 MS



SOLAR INPUT	
MAXIMUM PV ARRAY CAPACITY	60,000 WP
MPPT VOLTAGE RANGE	200 - 900 V _{DC}
MAX PV ARRAY VOLTAGE (VOC)	900 V _{DC}
NUMBER OF MPPT / STRING PER MPPT	1 / 1
MAX SOLAR INPUT CURRENT	200 A / MPPT

EFFICIENCIES	
FROM BATTERY	97.0%
EURO EFFICIENCY	96.0%
MPPT EFFICIENCY	99.9%

PHISICAL	
PROTECTION RATING	IP20
DIMENSIONS (W – H – D)	600 – 800 – 1400 MM
NET WEIGHT	200 KG

OPERATING ENVIRONMENT	
HUMIDITY	5 – 95% RELATIVE HUMIDITY (NON-CONDENSING)
ALTITUDE	< 3000 M
OPERATING TEMPERATURE	-30 <> +60 °C

OTHER PROTECTIONS	
DC REVERSE-POLARITY PROTECTION, ANTI-ISLANDING, RESIDUAL CURRENT PROTECTION, AC SHORT-CIRCUIT PROTECTION, AC OVER CURRENT/VOLTAGE PROTECTION, INTEGRATED DC SWITCH, INSULATION MONITORING	



MONITORING	
COMMUNICATION	CAN (BATTERY) / RS485 / ETHERNET
INTERFACES (1)	TOUCH SCREEN DISPLAY (FRONT), WEB & MOBILE APPS
UPLOADING INTERVAL	1 – 5 MINUTES

(1) CREDENTIALS WILL BE SHARED WITH USER MANUAL

STANDARDS & SAFETY	
GRID REGULATION	VDE-AR-N 4105:2018 / NRS 097-2-1:2017 / EN 50549-1:2019 / AS/NZS 4777.2:2015 / CEI 0-21:2019/ PPDS2018 / IEC 61683:1999 / RD 1699:2011/UNE 206006 / IN:2011/UNE 206007-1 / IN:2013/NTS 2019 (TYPE A, P.O. 12.2 2018-10) / C10/11:2019-09
SAFETY	EN 62109-1:2010 / EN 62109-2:2011 / IEC 62109-1(ED.1)IEC 62109-2(ED.1)
EMC	EN 61000-6-1:2007 / EN 61000-6-2:2005 / EN 61000-6-3:2007/A1:2011 / EN 61000-6-4:2007/A1:2011

CERTIFICATION
CE

PRODUCT WARRANTY
2 YEARS (CAN BE EXTENDED ON PROJECT BASIS)

