

AF3K-SL / AF4.6K-SL / AF6K-SL

HYBRID INVERTER SINGLE-PHASE

**Possibility of grid connection
(CEI-021)**

**Possibility of connection to
Storage Batteries**

ES-BOX12 / ES-BOX12 PLUS



ANTI-FLOW
Output current
blocking function.



MAX. INPUT C/C
Maximum panel power 1.5 of
the inverter power



MPPT
2 Channels



STRINGS
4 Strings



UPS FUNCTION
Exchange time
<10ms



PARALLEL
Max 6 Inverters

GENERAL DATA	AF3K-SL	AF4.6K-SL	AF6K-SL
DIMENSIONS (L X W X H, MM)	513x370x192	513x370x192	513x370x192
WEIGHT (KG)	17	17	17
TOPOLOGY	Without transformer	Without transformer	Without transformer
COOLING	Intelligent fan	Intelligent fan	Intelligent fan
RELATIVELY HUMIDITY	0-100%	0-100%	0-100%
INTERV. OPERATING TEMPERATURE (°C)	-25 to 60°C	-25 to 60°C	-25 to 60°C
OPERATIONAL ALTITUDE (M)	<4000	<4000	<4000
NOISE EMISSION (DB)	<25	<25	<25
STANDBY CONSUMPTION (W)	<10	<10	<10
MOUNTING	Wall bracket	Wall bracket	Wall bracket
COMMUNICATION WITH RSD	Solar Specification	Solar Specification	Solar Specification
COMMUNICATION INTERFACES	LCD,LED,RS485,CAN,Wi-Fi,GPRS,4G	LCD,LED,RS485,CAN,Wi-Fi,GPRS,4G	LCD,LED,RS485,CAN,Wi-Fi,GPRS,4G
EFFICIENCY	AF3K-SL	AF4.6K-SL	AF6K-SL
CEC EFFICIENCY (%)	97.0	97.0	97.0
MAXIMUM. EFFICIENCY (%)	97.6	97.6	97.6
PV A BAT. EFFICIENCY (%)	98.1	98.1	98.1
EFFICIENCY BETWEEN BATTERY AND AC (%)	96.8	96.8	96.8

FV INPUT DATA	AF3K-SL	AF4.6K-SL	AF6K-SL
MAX. INPUT POWER (KW)	4.5	6.9	9.0
MAX. FV VOLTAGE (V)	550	550	550
MPPT RANGE (V)	80-500	80-500	80-500
FULL MPPT INTERVAL (V)	90-500	130-500	170-500
NORMAL VOLTAGE (V)	360	360	360
STARTING VOLTAGE (V)	100	100	100
MAX. INPUT CURRENT (A)	18.5 x 2	18.5 x 2	18.5 x 2
MAX. SHORT CURRENT (A)	26 x 2	26 x 2	26 x 2
N. OF MPP TRACKERS/N. OF PV STRINGS	2 / 2	2 / 2	2 / 2
BATTERY CONNECTION	AF3K-SL	AF4.6K-SL	AF6K-SL
MAXCHARGING/DISCHARGING POWER (KW)	3.0	4.6	4.8
MAX. CHARGE/DISCHARGE CURRENT (A)	80	80	80
NORMAL BATTERY VOLTAGE (V)	51.2	51.2	51.2
INTERV. BATTERY VOLTAGE (V)	40-60	40-60	40-60
TYPE OF BATTERY	Lithium/lead ions etc.	Lithium/lead ions etc.	Lithium/lead ions etc.
AC NETWORK	AF3K-SL	AF4.6K-SL	AF6K-SL
MAXIMUM CONTINUOUS CURRENT (A)	14.0	22.0	28.0
MAXIMUM CONTINUOUS POWER (KVA)	3.0	4.6	6.0
RATED MAINS CURRENT (A)	13.7 / 13.1	21.0 / 20.0	27.3 / 26.1
NOMINAL MAINS VOLTAGE (V)	198 to 242 @ 220 / 207 to 253 @ 230		
NOMINAL MAINS FREQUENCY (HZ)	50/60		
POWER FACTOR	0.999 (Adjustable from 0.8 overexcited to 0.8 underexcited)		
CURRENT THD (%)	<3		
AC LOAD OUTPUT	AF3K-SL	AF4.6K-SL	AF6K-SL
MAXIMUM CONTINUOUS CURRENT (A)	14.0	22.0	28.0
MAXIMUM CONTINUOUS POWER (KVA)	3.0	4.6	6.0
MAXIMUM PEAK CURRENT (A) (10 MIN)	20.5 / 19.6	31.4 / 30	41.0 / 39.2
MAXIMUM PEAK POWER (KVA) (10 MIN)	4.5	6.9	9.0
RATED AC CURRENT (A)	13.7 / 13.1	21.0 / 20.0	27.3 / 26.1
NOMINAL AC VOLTAGE L-N (V)	220 / 230	220 / 230	220 / 230
NOMINAL AC FREQUENCY (HZ)	50 / 60	50 / 60	50 / 60
SWITCHING TIME (S)	Seamless	Seamless	Seamless
VOLTAGE THD (%)	<3	<3	<3

PROTECTION

- Reverse polarity protection PV
- Overcurrent/voltage protection
- Anti-islanding protection
- AC short-circuit protection
- Residual current detection
- Ground Fault Monitoring
- Insulation resistor detection
- Photovoltaic arc detection
- Protection level IP 65