

INVERTER IBRIDO MONOFASE

**POSSIBILITA' DI COLLEGAMENTO
BATTERIA DI ACCUMULO
RETE (CEI-021)**



ANTI-FLOW
Funzione blocco corrente in uscita.



INGRESSO MAX C/C
Potenza massima Pannelli 1,5 della potenza Inverter



WIFI
Integrato



MPPT
2 Canali



STRINGHE
4 Stringhe



FUNZIONE UPS
Tempo di scambio <10ms



PARALLELO
Max 6 Inverter



INGRESSO SUPPLEMENTARE
Gruppo Elettrogeno

CARATTERISTICHE

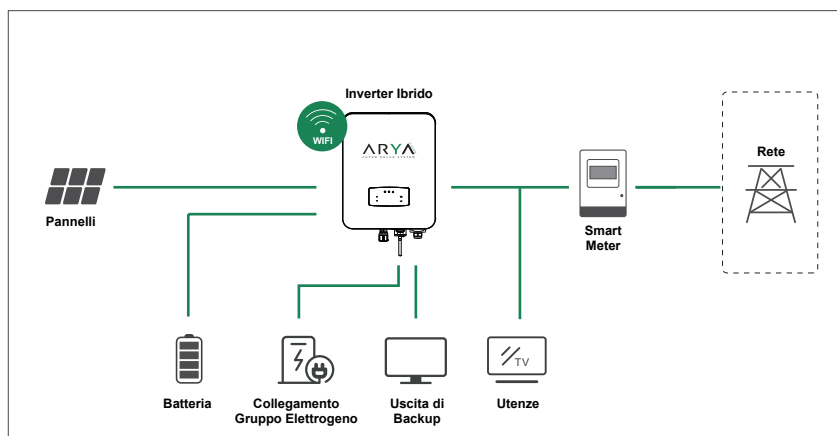
Supporto per l'ottimizzazione del tempo di utilizzo.

Modalità operative configurabili.

Funzione blocco corrente in uscita.

Dimensioni compatte e facilità di installazione.

Monitoraggio intelligente e aggiornamento del firmware remoto.



INVERTER IBRIDO MONOFASE

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

PV Input	AF3K-SL	AF4.6K-SL	AF6K-SL
Max. Input Power (kW)	4.5	6.9	9.0
Max. PV Voltage (V)	550	550	550
MPPT Range (V)	80 - 500	80 - 500	80 - 500
Full MPPT Range (V)	90 - 500	130 - 500	170 - 500
Normal Voltage (V)	360	360	360
Startup 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
No. of MPP Tracker / No. of PV String	2 / 2	2 / 2	2 / 2
Battery Port	AF3K-SL	AF4.6K-SL	AF6K-SL
Max. Charge/Discharge Power (kW)	3.0	4.6	4.8
Max. Charge/Discharge Current (A)	80	80	80
Battery Normal Voltage (V)	51.2	51.2	51.2
Battery Voltage Range (V)	40 - 60	40 - 60	40 - 60
Battery Type	Li-ion / Lead-acid etc.	Li-ion / Lead-acid etc.	Li-ion / Lead-acid etc.
AC Grid	AF3K-SL	AF4.6K-SL	AF6K-SL
Max Continuous Current (A)	14.0	22.0	28.0
Max Continuous Power (kVA)	3.0	4.6	6.0
Nominal Grid Current(A)	13.7 / 13.1	21.0 / 20.0	27.3 / 26.1
Nominal Grid Voltage (V)	198 to 242 @ 220 / 207 to 253 @ 230		
Nominal Grid 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
Max Continuous Current (A)	14.0	22.0	28.0
Max Continuous Power (kVA)	3.0	4.6	6.0
Max Peak Current (A) (10min)	20.5 / 19.6	31.4 / 30	41.0 / 39.2
Max Peak Power (kVA) (10min)	4.5	6.9	9.0
Nominal 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
Efficiency	AF3K-SL	AF4.6K-SL	AF6K-SL
CEC Efficiency (%)	97.0	97.0	97.0
Max. Efficiency (%)	97.6	97.6	97.6
PV to Bat. Efficiency (%)	98.1	98.1	98.1
Bat. between AC Efficiency (%)	96.8	96.8	96.8
Protection	AF3K-SL	AF4.6K-SL	AF6K-SL
PV Reverse Polarity Protection	Yes	Yes	Yes
Over Current/Voltage Protection	Yes	Yes	Yes
Anti-Islanding Protection	Yes	Yes	Yes
AC Short Circuit Protection	Yes	Yes	Yes
Residual Current Detection	Yes	Yes	Yes
Ground Fault Monitoring	Yes	Yes	Yes
Insulation Resister Detection	Yes	Yes	Yes
PV Arc Detection	Yes	Yes	Yes
Enclosure Protect Level	IP65	IP65	IP65
General Data	AF3K-SL	AF4.6K-SL	AF6K-SL
Dimensions (L x W x H, mm)	513 x 370 x 192	513 x 370 x 192	513 x 370 x 192
Weight (kg)	17	17	17
Topology	Transformerless	Transformerless	Transformerless
Cooling	Intelligent Fan	Intelligent Fan	Intelligent Fan
Relatively Humidity	0 - 100 %	0 - 100 %	0 - 100 %
Operating Temperature Range (°C)	- 25 to 60	- 25 to 60	- 25 to 60
Operating 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	SUNSPEC	SUNSPEC	SUNSPEC
Display & 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

INVERTER IBRIDO TRIFASE

POSSIBILITA' DI COLLEGAMENTO BATTERIA DI ACCUMULO RETE (CEI-021)



98,4% max. efficienza.

Capacità di funzionamento in parallelo con max. 10 unità

Facile controllo tramite display LED e app

Facile configurazione Wi-Fi tramite App

Intervallo di tensione della batteria super ampio da 135-750 V.

Grado di protezione IP65.

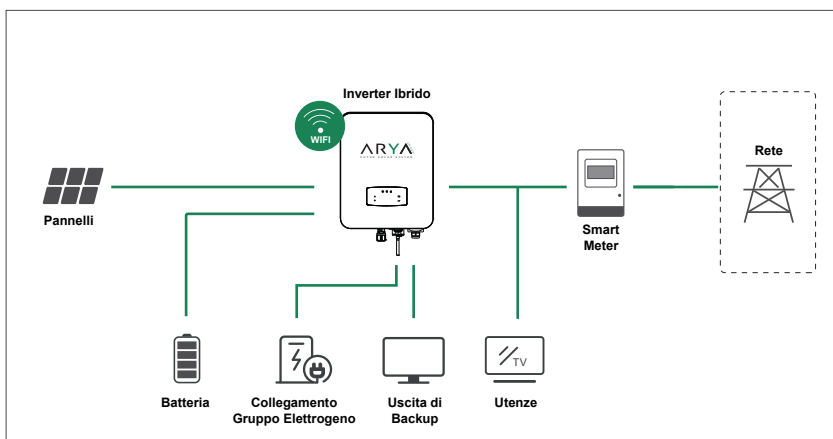
Design compatto ed elegante con tecnologia di pressofusione integrata.

Funzionamento efficiente a lungo termine con design avanzato di dissipazione del calore.

Gestione intelligente dell'energia con BMS integrato.

Fino al 110% di carico sbilanciato.

Sovraccarico dell'uscita CA fino al 125%.



INVERTER IBRIDO TRIFASE

AF10K-TH / AF15K-TH / AF20K-TH

PV Input	AF10K-TH	AF15K-TH	AF20K-TH
Max. DC Input Power (kW)	15	22.5	30
Max. PV Voltage (V)	1000	1000	1000
Rated DC Input Voltage (V)	620	620	620
DC Input Voltage Range (V)	150 - 1000	150 - 1000	150 - 1000
MPPT Voltage Range (V)	150 - 850	150 - 850	150 - 850
Full MPPT Range(V)	500 - 850	500 - 850	500 - 850
Start-up Voltage (V)	160	160	160
Max. DC Input Current (A)	20 x 2	20 + 32	32 x 2
Max. Short Current(A)	30 x 2	30 + 48	48 x 2
No. of MPPT Tracker / Strings	2/2	2/3	2/4
Battery Port	AF10K-TH	AF15K-TH	AF20K-TH
Battery Nominal Voltage (V)	400	500	500
Battery Voltage Range (V)	150 - 800	150 - 800	150 - 800
Max. Charge/Discharge Current (A)	30	50	50
Max. Charge/Discharge Power (W)	10K	15K	20K
Charging Curve	3 Stages	3 Stages	3 Stages
Compatible Battery Type	Li-ion / Lead-acid	Li-ion / Lead-acid	Li-ion / Lead-acid
AC Grid Output	AF10K-TH	AF15K-TH	AF20K-TH
Nominal AC Output Power (VA)	10000	15000	20000
Max. AC Input Power	15000	22500	30000
Max. AC Output Current (A)	17	27	32
Nominal AC Voltage (V)	230 / 400	230 / 400	230 / 400
Nominal AC Frequency (Hz)	50 / 60	50 / 60	50 / 60
Power Factor	1 (-0.8 - 0.8)	1 (-0.8 - 0.8)	1 (-0.8 - 0.8)
Current THD (%)	<3 %	<3 %	<3 %
AC Load Output (Back-up)	AF10K-TH	AF15K-TH	AF20K-TH
Nominal Output Power (VA)	10000	15000	20000
Nominal Output Voltage (V)	230 / 400	230 / 400	230 / 400
Nominal Output Frequency (Hz)	50 / 60	50 / 60	50 / 60
Nominal Output Current (A)	14.5	21.8	29
Peak Output Power	11000VA, 60s	16500VA, 60s	22000VA, 60s
THDV (with linear load)	<3 %	<3 %	<3 %
Switching Time (ms)	<10	<10	<10
Efficiency	AF10K-TH	AF15K-TH	AF20K-TH
Europe Efficiency	97.50 %	97.50 %	97.80 %
Max. Efficiency	98.20 %	98.30 %	98.30 %
Battery Charge/Discharge Efficiency	98.00 %	98.00 %	98.00 %
Protection	AF10K-TH	AF15K-TH	AF20K-TH
Reverse Polarity Protection	Yes	Yes	Yes
Over Current / Voltage Protection	Yes	Yes	Yes
Anti-islanding Protection	Yes	Yes	Yes
AC Short-circuit Protection	Yes	Yes	Yes
Leakage Current Detection	Yes	Yes	Yes
Ground Fault Monitoring	Yes	Yes	Yes
Grid Monitoring	Yes	Yes	Yes
Enclosure Protect Level	IP65	IP65	IP65
General Data	AF10K-TH	AF15K-TH	AF20K-TH
Dimensions (H x W x D) (mm)	588 x 426 x 250 mm	588 x 426 x 250 mm	588 x 426 x 250 mm
Weight (kg)	22kg	28kg	28kg
Topology	Transformerless	Transformerless	Transformerless
Cooling Concept	Intelligent Fan	Intelligent Fan	Intelligent Fan
Relatively Humidity	0 - 100 %	0 - 100 %	0 - 100 %
Operating Temperature Range (°C)	-25 to 60 °C	-25 to 60 °C	-25 to 60 °C
Operating Altitude (m)	<4000	<4000	<4000
Noise Emission (dB)	<30	<40	<40
Standby Consumption (W)	<5	<5	<5
Display & 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