



### **EASTMAN WORLD**

Welcome to Eastman World - Your Global Partner in Energy Solutions!





## **HYBRID INVERTER**

Single Phase - 3kW & 6 kW





# HYBRID INVERTER SINGLE PHASE

3 & 3.6 kW

The Eastman low voltage Series storage Inverters are designed to increase energy independence for homeowners. The power range is 3kW & 3.6kW, compatible with low voltage (40-60V) batteries.

Energy management is based on time-of-use and demand charge rate structures, significantly reduce the amount of energy purchased from the public grid.

Thanks for the UPS function (switch time < 10ms), enables the crucial loads power on during outages. Additionally, under the backup operation mode, the inverter provides you up to 150% peak output overloading. The Eastman low voltage Series storage inverters integrated with Arc Fault Circuit Interrupter (AFCI) and Rapid Shutdown.



#### **Product Features**



**PV OVERSIZE** 

1.5 Times PV Oversize



**MPPT CHANNELS** 

te Up to 2 MPPT Channels



**UPS FUNCTION** 

Switch Time < 10ms



PARALLEL

Max.6 Parallel Stacking



INPUT

Support Gererator

Support for Time-of-use Optimization



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Build in Anti-feed- in Function

Configurable Operation Modes



**→** 

Compact Size and Easy Installation

Arc Fault Circuit Interrupter (AFCI) (Optional)



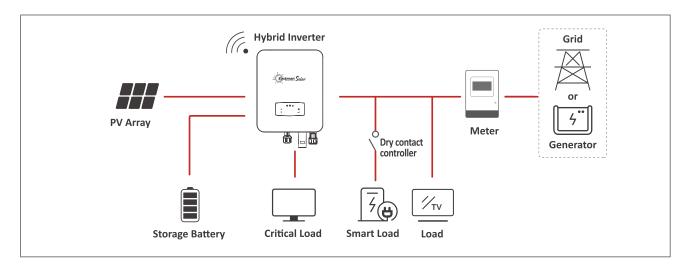


Smart Monitoring & Remote Firmware Upgrade

#### **HYBRID INVERTER (SINGLE PHASE)**

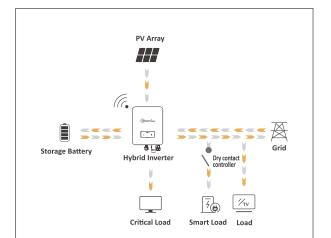


#### **Connection Diagram**

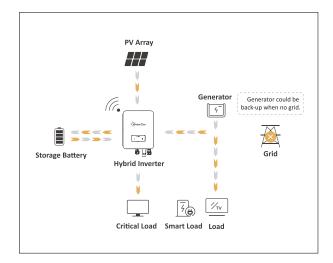


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Optimizing Self-Consumption (on-grid)

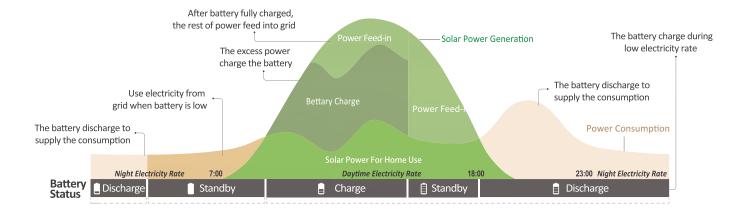


Emergency Power Supply (off-grid)



#### **Optimizing Self-Consumption Mode**

With home energy storage installed, home owners may also be able to change from a flat rate electricity tariff to a time-of-use tariff. For the areas and regions, where peak shaving can be applied.



## **HYBRID INVERTER (SINGLE PHASE)**



#### **Product Specifications**

PV Input	ES3KSLH	ES3.6KSLH
Max. Input Power (kW)	4.5	5.4
Max. PV Voltage (V)	550	
MPPT Range (V)	80 - 500	
Full MPPT Range (V)	90 - 500	110 - 500
Normal Voltage (V)	360	110 - 300
- ' '		
Startup Voltage (V)	100	
Max. Input Current (A)	18.5 x 2	
Max. Short Current (A)	26 x 2	
No. of MPP Tracker / No. of PV String	2/2	
Battery Port		
Max. Charge/Discharge Power (kW)	3.0	3,6
Max. Charge/Discharge Current (A)	80	
Battery Normal Voltage (V)	51.2	
Battery Voltage Range (V)	40 - 60	
Battery Type	Li-ion / Lead-acid / Sodium metal chloride battery.	
AC Grid		
Max Continuous Current (A)	14.0	17.0
Max Continuous Power (kVA)	3.0	3.6
Nominal Grid Current (A)	13.7 / 13.1	16.4 / 15.7
Nominal Grid Voltage (V)		
Nominal Grid Frequency (Hz)	198 to 242 @ 220 / 207 to 253 @ 230	
	50 / 60	
Power Factor	0.999 (Adjustable from 0.8 overexcited to 0.8 underexcited)	
Current THD (%)	< 3	
AC Load Output		
Max Continuous Current (A)	14.0	17.0
Max Continuous Power (kVA)	3.0	3.6
Max Peak Current (A) (10min)	20.5 / 19.6	24.6 / 23.5
Max Peak Power (kVA) (10min)	4.5	5.4
Nominal AC Voltage L-N (V)	220 / 230	
Nominal AC Frequency (Hz)	50 / 60	
Switching Time (ms)	Seamless	
Voltage THD (%)	<3	
Efficiency		
CEC Efficiency (%)	97.0	
Max. Efficiency (%)	97.6	
PV to Bat. Efficiency (%)	98.1	
Bat. between AC Efficiency (%)	96.8	
Protection	36.6	
PV Reverse Polarity Protection	Yes	
,	Yes	
Over Current/Voltage Protection		
Anti-Islanding Protection	Yes	
AC Short Circuit Protection	Yes	
Residual Current Detection	Yes	
Ground Fault Monitoring	Yes	
Insulation Resister Detection	Yes	
PV Arc Detection	Yes	
Enclosure Protect Level	IP65 / NEMA42	X
General Data		
Dimensions (W x H x D, mm)	370 x 535 x 19	2
Weight (kg)	18.5	
Topology	Transformerles	ss
Cooling	Intelligent Fan	
Relatively Humidity	0 - 100 %	
Operating Temperature Range (°C)	- 25 to 60	
Operating Altitude (m)	< 4000	
Noise Emission (dB)	< 25	
Standby Consumption (W)	< 10	
Mounting Communication with RSD	Wall Bracket	
Communication with RSD	SUNSPEC	
Display & Communication Interfaces Certification & Approvals EMC	LCD, LED, RS485, CAN, Wi-Fi, GPRS, 4G NRS097, G98/G99, EN50549-1, C10/C11,VDE-AR-N4105, VDE0126, IEC62109-1, IEC62109-2, IEC62116, IEC61727, UNE217001:2020 EN61000-6-2, EN61000-6-3	



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