



EASTMAN WORLD

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





HYBRID INVERTERS

Split phase 3 ~ 9.6 kW

Eastman Introduction

Founded in 2006

Established in 2006, Eastman Auto & Power Limited is a well-known name in the field of solar energy, energy storage, and power electronics, boasting a USD 300 million revenue and a dedicated workforce of over 3,000 professionals. Building on the group's decades-long success and maintaining the trust of our partners, Mr. Jagdish Rai Singal ventured into the future of energy with Eastman Auto & Power Limited. Today, the business spans over 25 countries across Asia, Africa, Middle East, and Europe and provides the world with cutting-edge products that have set new benchmarks in their respective segments. Driven by innovation, we continually set industry standards, ensuring uninterrupted power supply for residential, commercial, and industrial applications.

Our global solar distribution business provides reliable and high-quality solar solutions, including solar inverters, solar panels, solar batteries (carbon, gel, lithium, and tubular), solar pump inverters, solar charge controllers, and more. Our products offer a range of solutions to help you make the switch to clean energy. With us as your unwavering partners, we forge a sustainable future, amplifying global excellence through transformative products and services.



HYBRID INVERTER SPLIT PHASE

3 ~ 9.6 kW

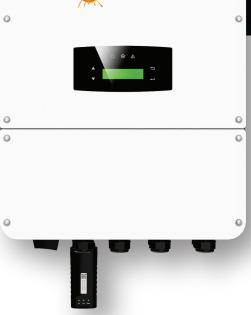


Introduction

The Eastman Split Phase series storage inverters are designed to increase energy independence for homeowners. The power range is from 3.0kW to 9.6kW, compatible with high voltage (80-495V) batteries.

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

Thanks for the UPS function (switch time < 10ms), that it 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 Split Phase series storage inverters meet the US safety regulations, integrated with Arc Fault Circuit Interrupter (AFCI) and Rapid Shutdown.















PV OVERSIZE
1.5 Times PV Oversize

MPPT CHANNELS
Up to 3 MPPT Channels

UPS FUNCTIONSwitch Time < 10ms

PARALLEL Max.6 Parallel Stacking

INPUT Support Generator

SPLIT-PHASE Support Split-phase (120/240Vac) Grid

Support for Time-of-use Optimization



Build in Anti-feed-in Function





Compact Size and Easy Installation





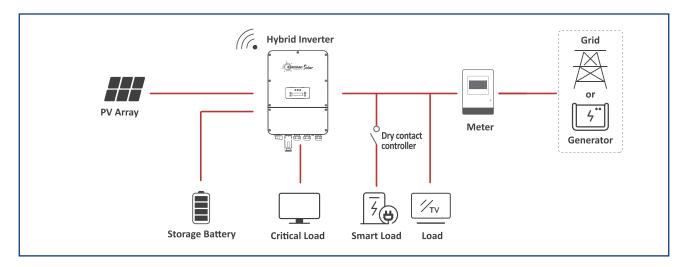
₽ □

Smart Monitoring & Remote Firmware Upgrade

HYBRID INVERTER SPLIT PHASE

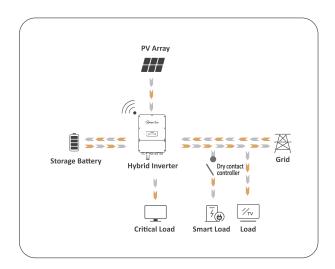
3 ~ 9.6 kW

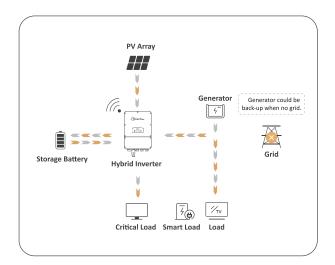
Connection Diagram



Optimizing Self-Consumption (on-grid)

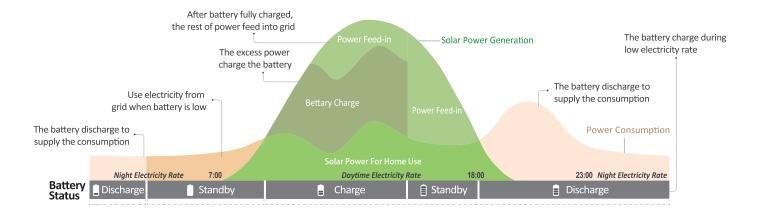
+ Emergency Power Supply (off-grid)





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 SPLIT PHASE 3 ~ 5.5 kW

Product Specifications

PV Input	ES3KW-DH-HY	ES3.6KW-DH-HY		ES4.6KW-DH-HY	ES5KW-DH-HY	ES5.5KW-DH-HY			
Max. Input Power (kW)	4.5	5.4	6.0	6.9	7.5	8.3			
Max. PV Voltage (V)	600								
MPPT Range (V)			80 -	550					
Full MPPT Range (V)	110 - 550	135 - 550	150 - 550	170 - 550	185 - 550	200 - 550			
Normal Voltage (V)			36	50					
Startup Voltage (V)			10	00					
Max. Input Current (A)	15.5 x 2								
Max. Short Current (A)	26.0 x 2								
No. of MPP Tracker / No. of PV String	26.0 x 2								
			2 /	2					
Battery Port		/			/				
Max. Charge/Discharge Power (kW)	4.5 / 4.5	5.4 / 5.4	6.0 / 6.0	6.9 / 6.9	7.5 / 7.5	8.3 / 8.3			
Max. Charge/Discharge Current (A)	50								
Battery Normal Voltage (V)	230								
Battery Voltage Range (V)	80 - 495								
Battery Type	Li-ion / Lead-acid								
AC Grid									
Max Continuous Current (A)	15	17.5	19.5	22.5	24.5	27			
Max Continuous Power (kVA)	3.0	3.6	4.0	4.6	5.0	5.5			
Nominal Grid Current (A)	12.5 / 14.5	15.0 / 17.5	17.0 /19.5	19.5 / 22.5	21.0 / 24	23.0 / 26.5			
Nominal Grid Voltage (V)	12.5 / 14.5 15.0 / 17.5 17.0 / 19.5 19.5 / 22.5 21.0 / 24 23.0 / 26.5 211 to 264 @ 240 / 183 to 229 @ 208								
Nominal Grid Frequency (Hz)									
	60								
Power Factor	1 default (adjustable from 0.8 leading to 0.8 lagging)								
Current THD (%)			<	3					
Gen Input & AC Load Output									
Max. Continuous Current (A)	15	17.5	19.5	22.5	24.5	27			
Max. Continuous Power (kVA)	3.0	3.6	4.0	4.6	5.0	5.5			
Max. Peak Current (A) (10min)	18.8 / 21.7	22.5 / 26.0	25 / 28.9	28.8 / 33.2	31.3 / 36.1	34.6 / 39.9			
Max. Peak Power (kVA) (10min)	4.5 / 4.5	5.4 / 5.4	6.0 / 6.0	6.9 / 6.9	7.5 / 7.5	8.3 / 8.3			
Nominal AC Voltage L-L (V)	240 / 208								
Nominal AC Voltage L-N (V)	120 / 104								
Nominal AC Frequency (Hz)	60								
Switching Time (ms)	< 10								
Voltage THD (%)	< 10								
Efficiency									
CEC Efficiency (%)			0.7						
	97.0								
Max. Efficiency (%)	97.6								
PV to Bat. Efficiency (%)	98.1								
Bat. between AC Efficiency (%)			96	5.8					
Protection									
PV Reverse Polarity Protection	Yes								
Bat. Reverse Polarity Protection	Yes								
Over Current/Voltage Protection	Yes								
Anti-Islanding Protection	Yes								
AC Short Circuit Protection									
Residual Current Detection	Yes Yes								
Ground Fault Monitoring	Yes								
Insulation Resister Detection									
PV Arc Detection	Yes								
	Yes								
Rapid Shut Down	Yes								
Protection Degree			IP65 / N	IEMA4X					
General Data									
Dimensions (W x H x D)			400 x 600 x 229 mm	n / 15.7 x 23.6 x 9.0 in					
Weight	25 kg / 55 lbs								
Topology	Tranformerless								
Cooling	Natural Convection								
Relative Humidity	0 - 100 %								
Operating Temperature Range	- 25 to 60 °C / - 77 to 140 °F								
Operating Altitude									
· -	< 4000 m/ < 13123 ft								
Noise Emission (dB)	< 25								
Standby Consumption (W)	<10								
Mounting	Wall Bracket								
Communication with RSD	SUNSPEC								
Display & Communication Interfaces	LCD, LED, RS485, CAN, Wi-Fi, 4G								
Certification & Approvals	UL 1741 SA, UL 1741, UL1699B, UL 1998, IEEE1547, IEEE1547A, IEEE1547.1, CSA 22.2 No.107, Rule21, HECO Rule 14								
EMC	FCC part 15 CLASS B								

FCC part15 CLASS B

EMC

HYBRID INVERTER SPLIT PHASE 6 ~ 9.6 kW

Product Specifications

PV Input	ES6KW-DH-HY	ES7KW-DH-HY	ES7.6KW-DH-HY		ES8.6KW-DH-HY	ES9.6KW-DH-HY				
Max. Input Power (kW)	9.0	10.5	11.4	12.0	12.9	15.0				
Max. PV Voltage (V)	600									
MPPT Range (V)			80 - !	550						
Full MPPT Range (V)	220 - 550	170 - 550	185 - 550	195 - 550	210 - 550	235 - 550				
Normal Voltage (V)			36	0						
Startup Voltage (V)			10	0						
Max. Input Current (A)	15.5 x 2			15.5 x 3						
Max. Short Current (A)	26.0 x 2			26.0 x 3						
No. of MPP Tracker / No. of PV String	2 / 2			3/3						
Battery Port	_,_									
Max. Charge/Discharge Power (kW)	0.0./0.0	10 5 / 10 2	11 4 / 10 2	11 5 / 10 3	11 5 / 10 2	11 5 / 10 2				
	9.0 / 9.0	10.5 / 10.3	11.4 / 10.3	11.5 / 10.3	11.5 / 10.3	11.5 / 10.3				
Max. Charge/Discharge Current (A)	50									
Battery Normal Voltage (V)	230									
Battery Voltage Range (V)	80 - 495									
Battery Type		Li-ion / Lead-acid								
AC Grid										
Max Continuous Current (A)	29.0	34.0	37	39	41.5	46.5				
Max Continuous Power (kVA)	6.0	7.0	7.6	8.0	8.6	9.6				
Nominal Grid Current (A)	25.0 /29.0	29.5 / 34.0	32.0 / 36.5	33.5 /38.5	36.0 / 41.5	40.0 / 46.5				
Nominal Grid Voltage (V)	211 to 264 @ 240 / 183 to 229 @ 208									
Nominal Grid Frequency (Hz)	60									
Power Factor	1 default (adjustable from 0.8 leading to 0.8 lagging)									
Current THD (%)	default (adjustable from 0.8 leading to 0.8 lagging)									
Gen Input & AC Load Output			•							
	20.0	24.0	37	20	41 E	46.5				
Max. Continuous Current (A)	29.0	34.0		39	41.5	46.5				
Max. Continuous Power (kVA)	6.0	7.0	7.6	8.0	8.6	9.6				
Max. Peak Current (A) (10min)	37.5 / 43.3	43.8 / 49.5	47.5 / 49.5	47.9 / 49.5	47.9 / 49.5	47.9 / 49.5				
Max. Peak Power (kVA) (10min)	9.0 / 9.0	10.5 / 10.3	11.4 / 10.3	11.5 / 10.3	11.5 / 10.3	11.5 / 10.3				
Nominal AC Voltage L-L (V)	240 / 208									
Nominal AC Voltage L-N (V)	120 / 104									
Nominal AC Frequency (Hz)	60									
Switching Time (ms)	<10									
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										
PV Reverse Polarity Protection	Voc									
Bat. Reverse Polarity Protection	Yes									
Over Current/Voltage Protection	Yes									
, <u> </u>	Yes									
Anti-Islanding Protection	Yes									
AC Short Circuit Protection			Ye							
Residual Current Detection	Yes									
Ground Fault Monitoring	Yes									
Insulation Resister Detection	Yes									
PV Arc Detection	Yes									
Rapid Shut Down	Yes									
Protection Degree			IP65 / N	EMA4X						
General Data										
Dimensions (W x H x D)			400 x 600 x 229 mm	/ 15.7 x 23.6 x 9.0 in						
Weight	25 kg / 55 lbs									
Topology	Tranformerless									
Cooling	Natural Convection Intelligent Fan									
Relative Humidity	0 - 100 %									
Operating Temperature Range	- 25 to 60 °C / - 77 to 140 °F									
Operating Altitude	< 4000 m/ < 13123 ft									
Noise Emission (dB)	< 25 < 40									
Standby Consumption (W)	< 10									
Mounting	Wall Bracket									
Communication with RSD	SUNSPEC									
Display & Communication Interfaces		LCD, LED, RS485, CAN, Wi-Fi, 4G								
Certification & Approvals	UL 1741 SA, UL 1741, UL1699B, UL 1998, IEEE1547, IEEE1547A, IEEE1547.1, CSA 22.2 No.107, Rule21, HECO Rule 14									
	FCC part15 CLASS B									

FCC part15 CLASS B

EMC



AMPS MIDDLE EAST FZ LLC

#703 - 704, 7TH Floor, Deira Twin Tower, Baniyas Square,Deira, Dubai (UAE)

EASTMAN AUTO & POWER LTD.

ASF Towers, 249, Udyog Vihar Phase-4, Gurugram, Haryana-122016, India

GUANGDONG EASTMAN NEW ENERGY CO., LTD

#1602, Meilan business centre, Intersection of Xixiang Avenue and Qianjin Second Road, Bao'an, District, Shenzhen-518102, China