



**Force HS-AS Series** 

Single Phase Hybrid Inverters Also available in AC coupled.

3kW ~ 6kW





The Energizer® Force HS Series inverter range offers advanced features and is compatible with high-voltage batteries. With the hybrid inverter range, your able to expand your solar system by adding extra batteries.

There are 5 inverter size options and it can connect to our Powerstack with up to seven battery modules connected in series, allowing for flexible storage capacity.

## **High Performance Single Phase Hybrid Inverters**

- **Dual-MPPT** design with precise MPPT algorithm
- 97.08% maximum efficiency
- IP65 rated
- **Optional export control**
- Compact & lightweight
- RS485, Wi-Fi, LAN, GPRS (optional) communications
- Wide voltage range/low start-up voltage
- Android and iPhone apps available
- 10 years warranty



















IODEL INPUT	Force 3.0HS	Force 3.7HS	Force 4.6HS	Force 5.0HS	Force 6.0HS
	Force 3.0AS	Force 3.7AS	Force 4.6AS	Force 5.0AS	Force 6.0AS
V INPUT [ONLY FOR HYBRID]					
lax. Input Power [W]	4500	5500	6900	7500	9000
	A: 2250 B: 2250	A: 2750 B: 2750	A: 3450 B: 3450	A: 3750 B: 3750	A: 4500 B: 450
lax. Input Voltage [V]			600		
tart-up Input Voltage [V]			75		
ated Input Voltage [V]			360		
IPPT Operating Voltage Range [V]			80~550		
lax. Input Current [A]			16/16		
lax. Short-circuit Current [A]			20/20		
o. of Independent MPP Trackers			2		
o. of Strings Per MPP Tracker			ı		
ATTERY CONNECTION					
attery Type	Lithium Battery (LFP)				
attery Voltage [V]	80~480				
lax. Charge/Discharge Current [A]	40 CAN (Communicate with Inverter), RS485 (Upgrade BMS)				
ommunication Interface		CAN (Communica	ite with inverter), RS485 (	upgrade BMS)	
C INPUT AND OUTPUT [GRID]	5000	2500	****	40000	10000
lax. AC Input Power [VA]	6000	7680	9200	10000	12000
lax. AC Input Current (per phase)[A]	27.3	34.9	41.8	45.5	54.5
ated Output Power [W]	3000	3680	4600	5000	6000
lax. Output Apparent Power [VA]	3300	4048/3680 <sup>1</sup>	5060	5500	6600
ated Output Current (per phase)[A]	13.6	16.7/161	20.9	22.7	27.3
ated Output Current (per phase)[A](For AUS)	13.0	16.0	20.0	21.7	26.1
ax. Output Current [A]	15.0	18.4	23.0	25.0	30.0
ated Grid Voltage [V]			220/230/240		
ated Grid Frequency [Hz]	50/60				
ower Factor	1 (adjustable from 0.8 leading to 0.8 lagging)				
HDi			<3% @rated power		
PS OUTPUT (WITH BATTERY)					
lax. Output Apparent Power [VA]	3000	3680	4600	5000	6000
eak Output Apparent Power [60s][VA]	3600	4400	5500	6000	7200
lax. Current (per phase)[A]	13.6	16.7	20.9	22.7	27.3
ated Output Voltage [V]	1510	10.1	220/230/240	22.11	25
ated Output Frequency [Hz]			50/60		
ower Factor		1 (adjustabl	e from 0.8 leading to 0.8	lagging)	
		i (dujustabi		iaggirig)	
HDi (linear load)	<2% @rated power				
arallel Operation [PCS]			10		
witchTime [ms]			<20		
FFICIENCY					
uro Efficiency	95.26%	95.70%	96.23%	96.30%	96.33%
lax. Efficiency	97.01%	97.08%	97.04%	97.08%	97.08%
lax. Battery Charge Efficiency (PV to BAT)(@full load)			98.50%		
ax. Battery Discharge Efficiency (PV to BAT)(@full load)			97.00%		
ROTECTION					
isulation Monitoring			YES		
esidual Current Monitoring			YES		
C Reverse Polarity Protection	YES				
nti-islanding Protection	Active Frequency Drift with Positive Feedback				
C Short-circuit Protection			YES		
C Overcurrent/Overvoltage Protection			YES		
C Switch			YES		
FD		0	OC: Type II / AC: Type III		
FCI			Optional		
TANDARD					
afety		c	N 62109-1, EN 62109-2		
arety MC			61000-6-2, EN 61000-6-3	3	
ertification	ENEOL	EN 1 549-1, C10/11, VDE-AR-N 4			77.2
ROTECTION	EIUCUE		100, 000, 000, CEI U-ZI,	11.2 U31-Z=1, M3 / NZ3 4/	11.4
			12.4% 440****		
imensions (WxHxD)[mm]			434*418*185		
/eight [kg]			22		
stallation		Wall N	Mounted (Indoor or Outdo	or)	
			Non-Isolated		
ppology			Natural		
ooling Method			35		
ooling Method oise Emission [dB]					
ooling Method oise Emission [dB] lax. Operating Altitude [m]			2000		
ooling Method oise Emission [dB]			2000 -25~60		
ooling Method oise Emission [dB] lax. Operating Altitude [m]					
ooling Method oise Emission [dB] lax. Operating Altitude [m] perating Temperature Range [°C]			-25~60		
ooling Method oise Emission [dB] lax. Operating Altitude [m] perating Temperature Range [°C] umidity [No Condensation]			-25~60 0%~100%		
ooling Method oise Emission [dB] lax. Operating Altitude [m] perating Temperature Range [°C] umidity [No Condensation] rotection Degree		Wi-F	-25~60 0%~100% IP65	1)	
ooling Method oise Emission [dB] lax. Operating Altitude [m] perating Temperature Range [°C] umidity [No Condensation] rotection Degree tandby Consumption [W]			-25~60 0%~100% IP65 <15		
ooling Method oise Emission [dB] lax. Operating Altitude [m] perating Temperature Range (°C] umidity [No Condensation] rotection Degree tandby Consumption [W] lonitoring Module			-25~60 0%~100% IP65 <15 Fi, LAN, 4G, GPRS (optiona		
ooling Method oise Emission [dB] lax. Operating Altitude [m] perating Temperature Range [°C] umidity [No Condensation] rotection Degree tandby Consumption [W] lonitoring Module ommunication			-25~60 0%~100% IP65 <15 Fi, LAN, 4G, GPRS (optiona 85, DRM, Ripple Control, I		