





Force HS-AS Series

Single Phase Hybrid Inverters Also available in AC coupled.

3kW ~ 6kW

EUROPEAN VERSION



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
- 97.8% 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



















MODEL INPUT	Force 3.0HS	Force 3.7HS	Force 4.6HS	Force 5.0HS	Force 6.0HS			
DV INDUT (ANIV FOR INVENIEN	Force 3.0AS	Force 3.7AS	Force 4.6AS	Force 5.0AS	Force 6.0AS			
PV INPUT [ONLY FOR HYBRID]	2000	4500	5000	6500	7000			
Max. Input Power [W]	3900	4680	5980	6500	7800			
Max. Input Voltage [V]			600					
Start-up Input Voltage [V]			75					
Rated Input Voltage [V]			360					
MPPT Operating Voltage Range [V]			80-550					
Max. Input Current [A]			13.5/13.5					
Max. Short-circuit Current [A]			18/18					
No. of Independent MPP Trackers			2					
No. of Strings Per MPP Tracker			1					
BATTERY CONNECTION								
Battery Type			Lithium Battery (LFP)					
Battery Voltage [V]		85-450						
Max. Charge/Discharge Current [A]		40						
Communication Interface		CAN (Communicate with Inverter), RS485 (Upgrade BMS)						
AC INPUT AND OUTPUT [GRID]								
Max. AC Input Power [VA]	7000	7680	9600	10000	12000			
Max. AC Input Current (per phase)[A]	31.8	34.9	43.6	45.5	54.5			
Rated Output Power [W]	3000	3680	4600	5000	6000			
Max. Output Apparent Power [VA]	3300	4048	5060	5500	6600			
Rated Output Current (per phase)[A]	13.0	16.0	20.0	21.7	26.1			
	14.3	17.6	22.0	23.9	28.7			
Max. Output Current [A]	14.3	17.0		23.9	∠8.1			
Rated Grid Voltage [V]		220/230/240						
Rated Grid Frequency [Hz]		50/60						
Power Factor		1 (adjustable from 0.8 leading to 0.8 lagging)						
THDi			<3% @rated power					
EPS OUTPUT (WITH BATTERY)								
Max. Output Apparent Power [VA]	5000	5000	6000	6000	6000			
Peak Output Apparent Power [60s][VA]	6000	6000	7200	7200	7200			
Max. Current (per phase)[A]	21.7	21.7	26.1	26.1	26.1			
Rated Output Voltage [V]			220/230/240					
Rated Output Frequency [Hz]		50/60						
Power Factor		1 (adjustable from 0.8 leading to 0.8 lagging)						
THDi (linear load)		<2% @rated power						
SwitchTime [ms]		<20 ≤20						
EFFICIENCY			-20					
Euro Efficiency			97.00%					
Max. Efficiency		97.80%						
Max. Battery Charge Efficiency (PV to BAT)(@full load)								
		98.50% 97.00%						
Max. Battery Discharge Efficiency (PV to BAT)(@full load)			97.00%					
PROTECTION								
Insulation Monitoring			YES					
Residual Current Monitoring		YES						
DC Reverse Polarity Protection		YES						
Anti-islanding Protection		YES						
AC Short-circuit Protection		YES						
AC Overcurrent/Overvoltage Protection		YES						
DC Switch		YES						
SFD		D	C: Type II / AC: Type III					
STANDARD								
Safety		FN F	52109-1, EN 62109-2					
EMC		EN 61000-6-2, EN 61000-6-3						
Certification	EN50540 1	EN50549-1, C10/11, VDE-AR-N 4105, G98, G99, CEI 0-21, NRS 097-2-1, AS / NZS 4777.2						
PROTECTION	LNJUJ49-1,	C.O. II, VDL-AR-IN 410.	, 330, 333, CLI U-21, N	051 2-1, 107 1123 47	4			
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			23					
Weight [kg]			Wall Mounted					
Weight [kg] Installation				Transformerless				
Weight [kg] Installation Topology			Transformerless					
Weight [kg] Installation Topology			Transformerless Natural					
Weight [kg] Installation Topology Cooling Method			Transformerless					
Weight [kg] Installation Topology Cooling Method Noise Emission [dB]			Transformerless Natural					
Weight [kg] Installation Topology Cooling Method Noise Emission [dB] Max. Operating Altitude [m]			Transformerless Natural 35					
Weight [kg] Installation Topology Cooling Method Noise Emission [dB] Max. Operating Altitude [m] Operating Temperature Range [°C]			Transformerless Natural 35 2000 -25 to 60					
Weight [kg] Installation Topology Cooling Method Noise Emission [dB] Max. Operating Altitude [m] Operating Temperature Range [°C] Humidity [No Condensation]			Transformerless Natural 35 2000 -25 to 60 0% to 100%					
Weight [kg] Installation Topology Cooling Method Noise Emission [dB] Max. Operating Altitude [m] Operating Temperature Range [°C] Humidity [No Condensation] Protection Degree			Transformerless Natural 35 2000 -25 to 60 0% to 100% IP65					
Weight [kg] Installation Topology Cooling Method Noise Emission [dB] Max. Operating Altitude [m] Operating Temperature Range [°C] Humidity [No Condensation] Protection Degree Standby Consumption [W]			Transformerless Natural 35 2000 -25 to 60 0% to 100% IP65 <10	hall				
Weight [kg] Installation Topology Cooling Method Noise Emission [dB] Max. Operating Altitude [m] Operating Temperature Range [°C] Humidity [No Condensation] Protection Degree Standby Consumption [W] Monitoring Module			Transformerless Natural 35 2000 -25 to 60 0% to 100% IP65 <10 ii, LAN, 4G, GPRS (option					
Weight [kg] Installation Topology Cooling Method Noise Emission [dB] Max. Operating Altitude [m] Operating Temperature Range [°C] Humidity [No Condensation] Protection Degree Standby Consumption [W] Monitoring Module Communication			Transformerless Natural 35 2000 -25 to 60 0% to 100% IP65 <10 ii, LAN, 4G, GPRS (option					
Weight [kg] Installation Topology Cooling Method Noise Emission [dB] Max. Operating Altitude [m] Operating Temperature Range [°C] Humidity [No Condensation] Protection Degree Standby Consumption [W] Monitoring Module Communication Display			Transformerless Natural 35 2000 -25 to 60 0% to 100% IP65 <10 ii, LAN, 4G, GPRS (option B5, DRM, Ripple Control LCD, App, Website					
Dimensions (WxHxD)[mm] Weight [kg] Installation Topology Cooling Method Noise Emission [dB] Max. Operating Altitude [m] Operating Temperature Range [°C] Humidity [No Condensation] Protection Degree Standby Consumption [W] Monitoring Module Communication Display Country of Manufacturer			Transformerless Natural 35 2000 -25 to 60 0% to 100% IP65 <10 ii, LAN, 4G, GPRS (option					