

# Hyner ESS WP Elite



- IP66 certified enclosure
- User-friendly HMI LCD design and easy configuration
- Supports energy storage from generator
- Dual inputs and dual outputs for smart energy management
- Built-in WiFi with APP for mobile monitoring
- 150% unbalanced load support
- User-adjustable charging current and voltage
- Reserved communication port for BMS (RS485)
- Parallel operation up to 6 units

MODEL	Hyner ESS WP Elite 8KW	Hyner ESS WP Elite 10KW	Hyner ESS WP Elite 12KW	Hyner ESS WP Elite 15KW
<b>MAXIMUM PV INPUT POWER</b>	12000W	15000W	18000W	24000W
<b>RATED OUTPUT POWER</b>	8000W	10000W	12000W	15000W
<b>MAXIMUM CHARGING POWER</b>	8000W	10000W	12000W	15000W
<b>GRID-TIE OPERATION</b>				
<b>PV INPUT (DC)</b>				
Nominal DC Voltage / Maximum DC Voltage	720 VDC / 900 VDC			
Start-up Voltage / Initial Feeding Voltage	150 VDC / 150 VDC			
MPP Voltage Range	150 VDC ~ 850 VDC			
Full MPP Voltage Range	400 VDC ~ 850 VDC	420 VDC ~ 850 VDC	400 VDC ~ 850 VDC	
Number of MPP Trackers / Maximum Input Current	2 / A: 15A, B: 15A	2 / A: 18A, B: 18A	2 / A: 27A, B: 18A	2 / A: 36A, B: 36A
<b>GRID OUTPUT (AC)</b>				
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)			
Output Voltage Range	184 - 265 VAC* per phase			
Nominal Output Current	11.6 A per phase	14.5 A per phase	17.4A per phase	21.7A per phase
Power Factor range	0.9 lag ~ 0.9 lead			
<b>EFFICIENCY</b>				
Maximum Conversion Efficiency (DC/AC)	>96%			
European Efficiency@ Vnominal	>95%			
<b>OFF-GRID OPERATION</b>				
<b>AC INPUT</b>				
AC Start-up Voltage / Auto Restart Voltage	120 - 140 VAC per phase / 180 VAC per phase			
Acceptable Input Voltage Range	170 - 290 VAC per phase			
Maximum AC Input Current	40 A			60 A
<b>PV INPUT (DC)</b>				
Maximum DC Voltage	900 VDC			
MPP Voltage Range	150 VDC ~ 850 VDC			
Full MPP Voltage Range	400 VDC ~ 850 VDC	420 VDC ~ 850 VDC	400 VDC ~ 850 VDC	
Number of MPP Trackers / Maximum Input Current	2 / A: 15A, B: 15A	2 / A: 18A, B: 18A	2 / A: 27A, B: 18A	2 / A: 36A, B: 36A
<b>BATTERY MODE OUTPUT (AC)</b>				
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)			
Output Waveform	Pure sine wave			
Efficiency (DC to AC)	>93%			
<b>HYBRID OPERATION</b>				
<b>PV INPUT (DC)</b>				
Maximum DC Voltage	900 VDC			
Start-up Voltage / Initial Feeding Voltage	150 VDC / 150 VDC			
MPP Voltage Range	150 VDC ~ 850 VDC			
Full MPP Voltage Range	400 VDC ~ 850 VDC	420 VDC ~ 850 VDC	400 VDC ~ 850 VDC	
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Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)			
Efficiency (DC to AC)	>93%			
<b>BATTERY &amp; CHARGER</b>				
Battery Voltage Range	40 ~ 60 VDC			
Maximum Discharging Current	200 A	220 A	250 A	280A
Maximum Charging Current	160 A	200 A	240 A	280A
<b>GENERAL</b>				
<b>PHYSICAL</b>				
Dimension, D x W x H (mm)	247 x 500 x 650			247 x 504.4 x 714.4
Net Weight (kgs)	50		54	59
<b>INTERFACE</b>				
Communication Port	RS-232, RS-485, USB, CAN and Wi-Fi			
Intelligent Slot	Optional for SNMP and Modbus cards			
<b>ENVIRONMENT</b>				
Humidity	0 ~ 100% RH (Non-condensing)			
Operating Temperature	-30to50°C, > 45°C power derating			
Altitude	0 ~ 1000 m**			
<b>PROTECTION &amp; CERTIFICATE</b>				
Safety	IEC 62116, IEC 61727, IEC 61683, IEC 62109, IEC 61000-6-2:2019, IEC 61000-6-4:2019, IEC 61000-3-11:2019, EN 61000-3-12: 2011			
Grid Connection Standard	EN 50549-1, VDE-AR-N4105			

\*These figures are based on VDE-4105 standard. All figures may vary depending on different AC voltage and country requirements.

\*\* Power derating 1% every 100 m when altitude is over 1000m  
Product specifications are subject to change without further notice