## **EEI HYBRID INVERTER**

## FOR A WIDE RENEWABLE ENERGY INTEGRATION

EEI Hybrid Inverter is the solution for small and medium scale hybrid plants using solar plus storage technologies. Thanks to his high reliability, robustness and flexible configuration it is the perfect inverter for mini and micro grid projects. Solar arrays integration through EEI MPPT Sting Boost to increase solar production and optimize the power output.

- Easy integration in all kind of containers thanks to reduced depth
- Seamless transfer from grid forming mode to grid supporting mode
- DC coupled batteries for higher conversion efficiency
- Multiple independent DC battery inputs to increase reliability and safety of battery control.













Rated power at 50 °   100 kW   360 kW     Nominal voltage   400V 3Ph   400V 3Ph   400V 3Ph     AC Voltage range   +10k /-10%   50 / 60 Hz     Nominal frequency   50 / 60 Hz   50 / 60 Hz     Nominal frequency range   ±5%   ±5%     Nominal Current   145 A   476 A     A Fower factor range (PQ dispatch)   adjustable between 0.8 and 1   adjustable between 0.8 and 1     Max Admissible Short Circuit Current   35 kA   35 kA     THD(I)   < 3%   < 3%     A ST A	MODEL	HYBRID 100	HYBRID 300
Nominal voltage         400V 3Ph         400V 3Ph           AC Voltage range         ±10% /-10%         ±10% /-10%           Nominal frequency         50 / 60 Hz         50 / 60 Hz           Nominal frequency range         ±5%         ±5%           Nominal Current         145 A         476 A           Power factor range (PQ dispatch)         adjustable between 0.8 and 1         adjustable between 0.8 and 1           Max Admissible Short Circuit Current         35 kA         35 kA           THD(I)         <3%	AC OUTPUT PARAMETERS		
AC Voltage range	Rated power at 50 °	100 kW	360 kW
Nominal frequency         50 / 60 Hz         50 / 60 Hz           Nominal frequency range         ± 5%         ± 5%           Nominal Current         145 A         476 A           Power factor range (PQ dispatch)         adjustable between 0.8 and 1         adjustable between 0.8 and 1           Max Admissible Short Circuit Current         35 kA         35 kA           THD(I)         < 3%         < 3%           CSIDE PARAMETERS           Max charge / discharge Power         100 kW         330 kW           N. of inputs         2         3           Max. Input Current         200 A         510 A           Input Voltage range         500 ÷ 730 VDC         650 ÷ 1000 VDC           Breaking capacity per input         50 kA         50 kA           DC Disconnector + Fuses         DC Disconnector + Fuses           PV INPUT PARAMETERS           N°of inputs for MPPT String BoostBoost         2         4           Maximum DC current per inputinput         100 A         150 A           EFFICIENCY           Maximum         > 97,5 %         > 97,5 %           GENERAL DATA           Dimensions (W / H / D)         1200 / 2300 / 600 mm         1800 / 2450 / 600 mm </td <td>Nominal voltage</td> <td>400V 3Ph</td> <td>400V 3Ph</td>	Nominal voltage	400V 3Ph	400V 3Ph
Nominal frequency range         ± 5%         ± 5%           Nominal Current         145 A         476 A           Power factor range (PQ dispatch)         adjustable between 0.8 and 1         adjustable between 0.8 and 3           Max Admissible Short Circuit Current         35 kA         35 kA           THD(I)         < 3%	AC Voltage range	+10% /-10%	+10% /-10%
Nominal Current 145 A 476 A Power factor range (PQ dispatch) adjustable between 0.8 and 1 adjustable between 0.8 and 1 Max Admissible Short Circuit Current 35 kA 35 kA THD(I) <3% 3% 3%  CSIDE PARAMETERS  Max charge / discharge Power 100 kW 330 kW N. of inputs 2 3 Max. Input Current 200 A 510 A Input Voltage range 500 + 730 VDC 650 + 1000 VDC Breaking capacity per input 50 kA 50 kA Electric Interface DC Disconnector + Fuses  PV INPUT PARAMETERS  N°of inputs for MPPT String BoostBoost 2 4 Maximum DC current per inputinput 100 A 150 A  EFFICIENCY  Maximum > 97,5 % > 97,5 %  GENERAL DATA Dimensions (W / H / D) 1200 / 2300 / 600 mm 1800 / 2450 / 600 mm Weight 692kg 1300kg Operating temperature range 0°C / +50°C 0°C / +50°C Max humidity (non-condensing) / Max altitude 95% / asl 2000m  PROTECTIONS  PV side disconnection device MCCB MCCB EMC filter Included Included AC-side disconnection device AC circuit breaker AC overvoltage protection Surge Suppressors Surge Suppressors	Nominal frequency	50 / 60 Hz	50 / 60 Hz
Power factor range (PQ dispatch)  Max Admissible Short Circuit Current  35 kA  35 kA  35 kA  THD(I)  CSIDE PARAMETERS  Max charge /discharge Power  100 kW  330 kW  N. of inputs  2  3  Max. Input Current  200 A  510 A  Input Voltage range  500 ÷ 730 VDC  Breaking capacity per input  Electric Interface  DC Disconnector + Fuses  PV INPUT PARAMETERS  N°of inputs for MPPT String BoostBoost  4  Maximum DC current per inputinput  100 A  150 A  EFFICIENCY  Maximum  > 97,5 %  POPT,5 %  CEPFICIENCY  Maximum  A 692kg  1300kg  Operating temperature range  0°C / +50°C  Max humidity (non-condensing) / Max altitude  POPT Side disconnection device  MCCB  MCCB  MCCB  MCCB  MCCB  MCCB  MCCB  Included  Included  AC-side disconnection device  AC circuit breaker  AC circuit breaker  AC covervoltage protection  Surge Suppressors  Surge Suppressors	Nominal frequency range	± 5%	± 5%
Max Admissible Short Circuit Current 35 kA 35 kA THD(I) < 3% < 3%  CSIDE PARAMETERS  Max charge /discharge Power 100 kW 330 kW N. of inputs 2 3 3 Max. Input Current 200 A 510 A Input Voltage range 500 + 730 VDC 650 + 1000 VDC Breaking capacity per input 50 kA 50 kA Electric Interface DC Disconnector + Fuses DC Disconnector + Fuses  PV INPUT PARAMETERS N°of inputs for MPPT String BoostBoost 2 4 Maximum DC current per inputinput 100 A 150 A  EFFICIENCY Maximum > 97.5 % > 97.5 %  GENERAL DATA Dimensions (W / H / D) 1200 / 2300 / 600 mm 1800 / 2450 / 600 mm Weight 692kg 1300kg Operating temperature range 0°C / +50°C 0°C / +50°C Max humidity (non-condensing) / Max altitude 95% / asl 2000m  PROTECTIONS PV side disconnection device MCCB MCCB EMC. filter Included Included AC-side disconnection device AC circuit breaker AC overvoltage protection Surge Suppressors Surge Suppressors	Nominal Current	145 A	476 A
THD(II) < 3% < 3%  DC SIDE PARAMETERS  Max charge /discharge Power	Power factor range (PQ dispatch)	adjustable between 0.8 and 1	adjustable between 0.8 and 1
DC SIDE PARAMETERS  Max charge /discharge Power  100 kW  330 kW  N. of inputs  2  3  Max. Input Current  200 A  510 A  Input Voltage range 500 ÷ 730 VDC  650 ÷ 1000 VDC  Breaking capacity per input 50 kA  50 kA  50 kA  Electric Interface DC Disconnector + Fuses  DC Disconnector + Fuses  PV INPUT PARAMETERS  N°of inputs for MPPT String BoostBoost 2 4  Maximum DC current per inputinput 100 A 150 A  EFFICIENCY  Maximum  > 97,5 %  > 97,5 %  GENERAL DATA  Dimensions (W / H / D) 1200 / 2300 / 600 mm 1800 / 2450 / 600 mm Weight 692kg 1300kg Operating temperature range 0°C / +50°C 0°C / +50°C Max humidity (non-condensing) / Max altitude 95% / asl 2000m  PROTECTIONS  PV side disconnection device MCCB EMC filter Included Included AC-side disconnection device AC circuit breaker AC overvoltage protection Surge Suppressors Surge Suppressors	Max Admissible Short Circuit Current	35 kA	35 kA
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Breaking capacity per input  50 kA  50 kA  Electric Interface  DC Disconnector + Fuses  PV INPUT PARAMETERS  N° of inputs for MPPT String BoostBoost  2  4  Maximum DC current per inputinput  100 A  150 A  EFFICIENCY  Maximum  > 97,5 %  > 97,5 %  > 97,5 %   SENERAL DATA  Dimensions (W / H / D)  1200 / 2300 / 600 mm  1800 / 2450 / 600 mm  Weight  692kg  1300kg  Operating temperature range  0°C / +50°C  Max humidity (non-condensing) / Max altitude  95% / asl 2000m  PROTECTIONS  PV side disconnection device  MCCB  MCCB  MCCB  MCCB  EMC filter  Included  AC-side disconnection device  AC circuit breaker  AC overvoltage protection  Surge Suppressors  Surge Suppressors		500 ÷ 730 VDC	650 ÷ 1000 VDC
Electric Interface DC Disconnector + Fuses DC Disconnector + Fuses  PV INPUT PARAMETERS  N° of inputs for MPPT String BoostBoost 2 4  Maximum DC current per inputinput 100 A 150 A  EFFICIENCY  Maximum > 97,5 % > 97,5 %  GENERAL DATA  Dimensions (W / H / D) 1200 / 2300 / 600 mm 1800 / 2450 / 600 mm  Weight 692kg 1300kg  Operating temperature range 0°C / +50°C 0°C / +50°C  Max humidity (non-condensing) / Max altitude 95% / asl 2000m 95% / asl 2000m  PROTECTIONS  PV side disconnection device MCCB MCCB  EMC filter Included Included  AC-side disconnection device AC circuit breaker  AC overvoltage protection Surge Suppressors Surge Suppressors		50 kA	50 kA
N°of inputs for MPPT String BoostBoost 2 4  Maximum DC current per inputinput 100 A 150 A  EFFICIENCY  Maximum > 97,5 % > 97,5 %  GENERAL DATA  Dimensions (W / H / D) 1200 / 2300 / 600 mm 1800 / 2450 / 600 mm  Weight 692kg 1300kg  Operating temperature range 0°C / +50°C 0°C / +50°C  Max humidity (non-condensing) / Max altitude 95% / asl 2000m 95% / asl 2000m  PROTECTIONS  PV side disconnection device MCCB MCCB  EMC filter Included Included  AC-side disconnection device AC circuit breaker  AC overvoltage protection Surge Suppressors  Surge Suppressors	Electric Interface	DC Disconnector + Fuses	DC Disconnector + Fuses
EFFICIENCY  Maximum > 97,5 % > 97,5 %  GENERAL DATA  Dimensions (W / H / D) 1200 / 2300 / 600 mm 1800 / 2450 / 600 mm  Weight 692kg 1300kg  Operating temperature range 0°C / +50°C 0°C / +50°C  Max humidity (non-condensing) / Max altitude 95% / asl 2000m 95% / asl 2000m  PROTECTIONS  PV side disconnection device MCCB MCCB  EMC filter Included Included  AC-side disconnection device AC circuit breaker  AC overvoltage protection Surge Suppressors  Surge Suppressors	PV INPUT PARAMETERS  N°of inputs for MPPT String BoostBoost	2	4
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Dimensions (W / H / D)  1200 / 2300 / 600 mm  1800 / 2450 / 600 mm  Weight  692kg  1300kg  Operating temperature range  0°C / +50°C  Max humidity (non-condensing) / Max altitude  95% / asl 2000m  PROTECTIONS  PV side disconnection device  MCCB  MCCB  EMC filter  Included  AC-side disconnection device  AC circuit breaker  AC overvoltage protection  Surge Suppressors  Surge Suppressors	Maximum	> 97,5 %	> 97,5 %
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Weight 692kg 1300kg Operating temperature range 0°C / +50°C 0°C / +50°C Max humidity (non-condensing) / Max altitude 95% / asl 2000m 95% / asl 2000m  PROTECTIONS  PV side disconnection device MCCB MCCB EMC filter Included Included AC-side disconnection device AC circuit breaker AC overvoltage protection Surge Suppressors Surge Suppressors		1200 / 2300 / 600 mm	1800 / 2450 / 600 mm
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PV side disconnection device MCCB MCCB  EMC filter Included Included  AC-side disconnection device AC circuit breaker AC circuit breaker  AC overvoltage protection Surge Suppressors Surge Suppressors	Max humidity (non-condensing) / Max altitude		
PV side disconnection device MCCB MCCB  EMC filter Included Included  AC-side disconnection device AC circuit breaker AC circuit breaker  AC overvoltage protection Surge Suppressors Surge Suppressors	PROTECTIONS		
EMC filter Included Included  AC-side disconnection device AC circuit breaker  AC overvoltage protection Surge Suppressors Surge Suppressors		MCCR	MCCR
AC-side disconnection device AC circuit breaker AC circuit breaker  AC overvoltage protection Surge Suppressors Surge Suppressors			
AC overvoltage protection Surge Suppressors Surge Suppressors			
	PV DC overvoltage protection	Surge Suppressors	Surge Suppressors

Included

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Included

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