



MOEBIUS
Intelligent PV Inverters

ZED HYBRID
TRIO HV



DATASHEET

HYB-ZED-HV-5 KVA-2 | HYB-ZED-HV-10 KVA-2

Designed and manufactured by



DARWIN
RENEWABLE ENERGY INNOVATOR





<i>Efficiency</i>	HYB-ZED-HV-5 KVA-2	HYB-ZED-HV-10 KVA-2
Max. Efficiency	98,2%	98,4%
EU. Efficiency	97,2% - BAT : 98%	97,9% BAT: 98%
	98,2%	
	97,2% - BAT : 98%	
<i>Input (PV)</i>		
Max. PV Power(W)	8000 W	15000 W
Max. PV voltage (V)	1000 V	1000 V
Max. input current (input A/input B) (A)	15A/15A	20A/30A
Max. short current (input A/input B) (A)	20A/20A	30A/40A
Start operating voltage (V)	90V	90V
PV MPPT Voltage Range:	160V - 950V	160V - 950V
No.of MPPT trackers	2	2
String per MPP tracker	1+1	1+2
<i>Input (BAT)</i>		
Compatible battery type	Lithium-ion/Lead-acid	Lithium-ion/Lead-acid
Nominal battery voltage (V)	200V - 600V	200V - 600V
Battery voltage range (V)	150V - 600V	150V - 600V
Max. charge/discharge current (A)	25A / 25A	50A / 50A
Max. charge/discharge power (W)	8000W / 5200W	15000W / 10500W
Lithium battery charge curve	Self-adaption to BMS	Self-adaption to BMS
<i>Output (Grid)</i>		
Nominal AC output power (W)	5000 W	10000 W
Max. AC output apparent power (VA)	5500 VA	10000 VA
Max.AC output power (PF=1) (W)	5500 W	10000 W
Max. AC output current (A)	3*8,3A	3*15,2A
AC Input Max.Current:	X	X
Rated AC voltage (V)	380V / 400V	380V / 400V
AC voltage range (V)	277-520V (Adjustable)	277-520V (Adjustable)
Rated grid frequency (Hz)	50Hz/60Hz	50Hz/60Hz
AC frequency range(Hz)	45Hz-55Hz / 55 Hz-65 Hz (Adjustable)	45Hz-55Hz / 55 Hz-65 Hz (Adjustable)
Grid connexion	Three phase	Three phase
Power factor	> 0,99 @rated power (Adjustable 0,8 LG - 0,8 LD)	> 0,99 @rated power (Adjustable 0,8 LG - 0,8 LD)
THDI	<3% (Rated Power)	<3% (Rated Power)
<i>Output (Back up)</i>		
Nominal output voltage	380V / 400V	380V / 400V
Nominal output frequency	50Hz/60Hz	50Hz/60Hz
Nominal output power	5000W	10000W
Nominal output current	3*7,6A	3*15,2A
Transfer time	10ms (typ) / 20ms (max)	10ms (typ) / 20ms (max)
THDV	<3% (R load), 5% (RCD Load)	<3% (R load), 5% (RCD Load)



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Packaging & logistics

Carton packaging dimension (W x H x D)	X
G.W. (Gross Weight)	X
Qty per pallet (pcs)	X
Pallet Dimension (W x H x D)	X
Pallet m ³ (CBM)	X
20 ft cont. Pallet Qty (Plt) / product Qty (pcs)	X
40 ft cont. Pallet Qty (Plt) / product Qty (pcs)	X

General

Max. operation altitude (m)	4000
Noise emission (dB)	30dB
Ingress protection degree	IP65
Operating temperature range (°C)	-25~60
Relative humidity(%)	0~100%
Cooling concept	Natural Cooling
Mounting	Wall bracket
Dimensions (W x H x D)	530 x 550 x 212 mm
Weight (kg)	26kg
PV connection way	MC4/H4
Battery connection way	Dedicated DC connector
AC connection way(grid & back up)	X

Protection

Protection category	
DC switch	
Anti-islanding protection	Support
AC overcurrent protection	Support
AC short circuit protection	Support
DC reverse connection	
Surge Arrester	DC Type III, AC Type III
Insulation detection	Support
Leakage current protection	
PV overvoltage category	
AC overvoltage category	
GFCI	Support
AFCI	Optional
RSD	Optional

HMI & COM

Display	LED+APP (Bluetooth)
Communication	BMS (CAN/RS485), Optional: WiFi/GPRS/4G/Ethernet, DI(DRM/R-CR) / Meter (RS485), 1*DO, USB (Firmware upgrade)

Warranty

5/10 Years (Optional)

Certification

Grid	IEC 61727/62116 ,AS 4777, EN 50549-1
Safety	IEC62109-1&2, VDE-4105, IEC62040-1
EMC	IEC62477-1, CEI 0-21, G98

