



MOEBIUS
Intelligent PV Inverters

DUO

SOLAR PV INVERTER



Monophase
2 MPPT

DATASHEET

DUO-4 KVA-2 | DUO-5 KVA-2 | DUO-6 KVA-2

Designed and manufactured by



DARWIN
RENEWABLE ENERGY INNOVATOR



<i>Efficiency</i>	DUO-4 KVA-2	DUO-5 KVA-2	DUO-6 KVA-2
Max. Efficiency	98,0%	98,2%	98,2%
EU. Efficiency	97,0%	97,3%	97,3%
<i>Input (PV)</i>			
Max. Input Voltage	550 V	550 V	550 V
Max. PV configuration (STC)	160,00%	160,00%	160,00%
Max. PV Power (W)	6400 W	8000 W	8000 W
Rated Input Voltage	360 V	360 V	360 V
Max. Input Current	30A (2*15A)	30A (2*15A)	30A (2*15A)
Max. Short Circuit Current	40A (2*20A)	40A (2*20A)	40A (2*20A)
Start Input Voltage	90V	90 V	90 V
MPPT Operating Voltage Range	70V-540V	70V-540V	70V-540V
Max. Number of PV Strings	2 (1/1)	2 (1/1)	2 (1/1)
No. of MPPTs	2	2	2
<i>Output (Grid)</i>			
Rated AC Active Power	4000 W	5000 W	6000 W
Max. AC Apparent Power	4400 VA	5500 VA	6000 VA
Max. AC Active Power (PF=1)	4400 W	5500 W	6000 W
Max. AC Output Current	20A	25A	27,3 A
Rated AC Voltage	220V / 230V, L + N + P	220V / 230V, L + N + P	220V / 230V, L + N + P
AC Voltage Range (1)	160V-300V (Adjustable)	160V-300V (Adjustable)	160V-300V (Adjustable)
Rated Grid Frequency	50 Hz / 60 Hz	50 Hz / 60 Hz	50 Hz / 60 Hz
Grid Frequency Range (2)	45Hz-55Hz / 55 Hz-65 Hz (Adjustable)	45Hz-55Hz / 55 Hz-65 Hz (Adjustable)	45Hz-55Hz / 55 Hz-65 Hz (Adjustable)
THDI	<3% (Rated Power)	<3% (Rated Power)	<3% (Rated Power)
DC Current Injection	<0,5%In	<0,5%In	<0,5%In
Power Factor	>0,99 Rated Power (Adjustable 0,8 LD-0,8 LG)	>0,99 Rated Power (Adjustable 0,8 LD-0,8 LG)	>0,99 Rated Power (Adjustable 0,8 LD-0,8 LG)

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<i>General</i>		<i>Packaging & logistics</i>	
Topology	Transformerless	Carton packaging dimension (W x H x D)	445 x 428 x 240 mm
IP Rating	IP65	G.W. (Gross Weight)	10 kg
Night Self Consumption	< 1 W	Qty per pallet (pcs)	24 + 24
Cooling	Natural Cooling	Pallet Dimension (W X H X D)	1300 x 1000 x 2178 mm
Operating Temperature Range	-25°C - 60°C	Pallet m ³ (CBM)	2,8 m ³
Relative Humidity Range	0 - 100 %	20 ft cont. Pallet Qty (Plt) / product Qty (pcs)	16 pallets / 384 pcs
Max. Operating Altitude	4000 m	40 ft cont. Pallet Qty (Plt) / product Qty (pcs)	36 pallets / 864 pcs
Noise (typical)	30 dB		
Dimensions (W x H x D)	350 x 347 x 137 mm		
N.W. (Netto Weight)	8,5 kg		

Protection

DC switch	Support
Anti-islanding protection	Support
AC Overcurrent protection	Support
AC short current protection	Support
DC reverse connection	Support
Surge Arrester	DC Type III (Optional) / AC Type III
Insulation detection	Support
Leakage current protection	Support

HMI & COM

Display	Wireless & APP + LED, LCD (Optional)
Communication	Optional: WiFi / GPRS / RS485

Warranty

5 years, 10 years when installed by Darwin registered installer

Certification

Safety	IEC62109-1, IEC62109-2
Grid Code	DE-AR-N 4105, EN 50549-1, CEI 0-21, UNE206001/206002-1, IEC61727/62116, Ordinance n°140 2022, IEEE1547, AS4777, VDE0126-1

