

# ES G2 Hybrid Inverter

## 3.6 to 6.0 kW Single Phase



### Compact and efficient inverter for optimised solar energy back-up

Meeting the needs of combined PV rooftop and energy storage systems, the ES G2 hybrid inverter provides optimised energy flexibility. By facilitating maximum back-up of generated solar energy, a high degree of autonomy can be achieved. Factor in its modern design and smart home integration abilities, then ES G2 is the ideal choice for residential applications. The ES G2 series is compatible with a range of batteries, including the GoodWe Lynx Home U.

- ▲ Optimised energy autonomy
- ▲ Smart and efficient operations
- ▲ Modern and compact design
- ▲ Highest safety standards
- ▲ UPS level switching <10ms
- ▲ Smart home integration
- ▲ Parallel connection

## Technical data

		MAGW3600- ES-20	MAGW3600M- ES-20	MAGW5000- ES-20	MAGW5000M- ES-20	MAGW6000- ES-20	MAGW6000M- ES-20
<b>BATTERY INPUT DATA</b>	Battery type*	Li-Ion					
	Nominal battery voltage	48V					
	Battery voltage range	40V ~ 60V					
	Max. continuous charging current*	75A	60A	120A	60A	120A	60A
	Max. continuous discharging current*	75A	60A	120A	60A	120A	60A
	Max. charge power*	3600W	3000W	5000W	3000W	6000W	3000W
<b>PV STRING INPUT DATA</b>	Max. discharge power	3900W	3200W	5300W	3200W	6300W	3200W
	Max. input power**	5400W	5400W	7500W	7500W	9000W	9000W
	Max. input voltage	600V					
	MPPT operating voltage range	60V ~ 550V					
	Start-up voltage	58V					
	Nominal input voltage	360V					
	Max. input current per MPPT	16A					
	Max. short circuit current per MPPT	23A					
	Number of MPPT trackers	2	2	2	2	2	2
	Number of strings per MPPT	1					
<b>AC OUTPUT DATA (ON-GRID)</b>	Nominal apparent power output to utility grid	3680VA	3680VA	5000VA***	5000VA***	6000VA***	6000VA***
	Max. apparent power output to utility grid	3680VA	3680VA	5000VA***	5000VA***	6000VA***	6000VA***
	Max. apparent power from utility grid	7360VA	3680VA	10000VA	5000VA	10000VA	6000VA
	Nominal output voltage	220V / 230V / 240V					
	Nominal AC grid frequency	50Hz / 60Hz					
	Max. AC current output to utility grid	16.7A	16.7A	22.7A	22.7A	27.3A	27.3A
	Max. AC current from utility grid	33.5A	16.7A	43.5A	22.7A	43.5A	27.3A
	Power factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)					
	Max. total harmonic distortion	<3%					
	<b>AC OUTPUT DATA (BACK-UP)</b>	Back-up nominal apparent power	3680VA	3680VA	5000VA	5000VA	6000VA
Max. output apparent power		3680VA (7360VA @10sec)	3680VA	5000VA (10000VA @10sec)	5000VA	6000VA (10000VA @10sec)	6000VA
Max. output current		16.7A	16.7A	22.7A	22.7A	27.3A	27.3A
Nominal output voltage		220V / 230V / 240V					
Nominal output frequency		50Hz / 60Hz					
Output THDv (@Linear Load)		<3%					
<b>EFFICIENCY</b>	Max. efficiency	97.6%					
	European efficiency	96.7%					
	Max. battery to AC efficiency	95.5%					
	MPPT efficiency	99.9%					

<b>PROTECTION</b>	
PV string current monitoring	Integrated
PV insulation resistance detection	Integrated
Residual current monitoring	Integrated
PV reverse polarity protection	Integrated
Anti-islanding protection	Integrated
AC overcurrent protection	Integrated
AC short circuit protection	Integrated
AC overvoltage protection	Integrated
DC switch	Integrated
DC surge protection	Type II
AC surge protection	Type II
AFCI	Optional
Remote shutdown	Integrated

\* The actual charge and discharge current / power also depends on the battery.

\*\* The max power is the actual power of PV.

\*\*\* 4600 for VDE-AR-N4105 & NRS 097-2-1.

<b>GENERAL</b>	
Operating temperature range	-25°C to 60°C
Relative humidity	0 to 95%
Max. operating altitude	3000m (>2000m derating)
Cooling method	Natural convection
Display	LED, WLAN and App
Communication with BMS	CAN
Communication with meter	RS485
Communication with portal	Wifi / Wifi + LAN / 4G
Weight	20.8kg (GW3600-ES-20) 20kg (GW3600M-ES-20) 21.5kg (GW5000-ES-20) 20kg (GW5000M-ES-20) 21.5kg (GW6000-ES-20) 20kg (GW6000M-ES-20)
Dimensions (WxHxD)	505.9 x 434.9 x 154.8mm
Topology	Non-isolated
Self-consumption at night	<10W
Ingress protection (IP) rating	IP65
Mounting method	Wall mounted

# Tell me more

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