



## Easy Installation

- Efficient commissioning process via the smartphone app
- Plug and play installation
- Lightweight and compact

# Ultra Intelligent

- Multiple operating modes with integrated intelligent EMS
- Suitable for both retrofitting and new installations
- Real time data monitoring with intelligent monitoring system

#### **Durable & Reliable**

- IP66 rating, suitable for indoor and outdoor installation
- Integrated blackout protection with built-in EPS
- Integrated DC & AC SPD

### More Revenue

- Up to 16A PV input, Compatible with high current PV panels
- Up to 200% PV power for more energy
- Low start-up voltage for longer PV power generation

www.clenergy.com Datasheet Ver. 1.0

# **Specifications**



Datasheet	CGH S3.6L	CGH S4.6L	CGH S5.0L	CGH S6.0L
Battery Input Data				
Battery Type		Lithiu	m-ion	
Rated Battery Voltage	48V			
Battery Voltage Range	40-60V			
Max. Charging / Discharging Power	3680W / 3680W	4600W / 4600W	5000W /	5000W
Max. Charging Current	80A		100A	
Max. Discharging Current	80A		100A	
Communication With BMS		CAN,	RS485	
PV Input Data				
Max. Input Power	7360W	9200W	10000W	12000W
Max. Input Voltage			0V	
Start-up Voltage	50V			
Rated Input Voltage	360V			
MPPT Operating Voltage Range	60-550V 2 / 1			
MPPT number / Input strings number per MPPT	16A / 16A			
Max. Input Current per MPPT  Max. Input Short Circuit Current per MPPT	23A /23A			
AC Output Data(On Grid)	Z3A /Z3A			
Rated Apparent Power Output to Grid	3680VA	4600VA	5000VA	6000VA
Max. Apparent Power Output to Grid	3680VA	4600VA 4600VA	5000VA 5000VA	6000VA
Max. Apparent Power Output to Grid	7360VA	9200VA	1000	
Rated AC Current Output to Grid	16A	20.9A	21.7A	26.1A
Max. AC Current Output to Grid	16A	20.9A	22.7A	27.3A
Max. AC Current from Grid	32A	41.8A	43.	
Rated Grid Voltage	L / N / PE, 220V / 230V / 240V			
Grid Voltage Range	170-280Vac (According to local standard)			
Rated Frequency	50Hz / 60Hz			
Output THDi (@Nominal output)	< 3%			
Power Factor	1 (Adjustable from 0.8 leading to 0.8 lagging)			
AC Output Data(Backup)				
Rated Apparent Power	3680VA	4600VA	5000VA	6000VA
Max. Apparent Power	3680VA	4600VA	5000VA	6000VA
Peak Output Apparent Power, Duration	5520VA, 60s	6900VA, 60s	7500VA, 60s	9000VA, 60s
Max. Output Current	16A	20.9A	22.7A	27.3A
Rated Voltage, Frequency	220V / 230V / 240V, 50 / 60Hz			
THDv (@Liner load)	< 2% ≤ 10ms			
Switch Time		≤ 1(	)ms	
Efficiency		07	40/	
Max. Efficiency	97.1% 96.7%			
European Efficiency BAT Charged by PV / AC Max. Efficiency	96.7% 96.4% / 95.0%			
BAT Charged by PV / AC Max. Efficiency BAT Discharged to AC Max. Efficiency	95.0%			
Protection		75.	.0 /0	
PV Reverse Polarity Protection		V	25	
PV Insulation Resistance Detection	Yes Yes			
Anti-islanding Protection	Yes			
AC Over Voltage Protection	Yes			
AC Over current protection	Yes			
AC Short Circuit Protection	Yes			
Leakage Current Monitoring	Yes			
DC Switch (Solar)	Yes			
Overvoltage category	DC: Type II, AC: Type III			
AFCI	Optional			
General Data				
Operating Ambient temperature range	-25°C - +60°C			
Standby self-consumption	<15W			
Гороlоду	High Frequency Insolation (for Battery)			
P Rating	IP66			
Relative Humidity	0-100% (Non-condensing)			
Communication	Wifi / 4G (optional), RS485, CAN			
Max. Operation Altitude	3000m (>2000m deratings)			
Weight	23kg			
Cooling Method	Natural Convection			
Dimension (W*H*D)	520*420*224mm			
Mounting Method Display	Wall Mounted			
	LED Indicators, Bluetooth+APP EN 61000-6-1, EN 61000-6-3, IEC 62109-1 / 2,			
Standards		EN 61000-6.1 EN 6100	00-6-3 IEC 62100 1 / 2	