

8 Technical Specifications

Technical Data	Cygni8.0HS			Cygni10.0HS		
	M2	M3	M4	M2	M3	M4
Battery Input Data						
Battery Type	LiFePO4					
Expandable Quantity	2	3	4	2	3	4
Nominal Energy(kWh)	7.68	11.52	15.36	7.68	11.52	15.36
Usable Energy(kWh)	7.30	10.94	14.59	7.30	10.94	14.59
Operating Voltage(V)	168~219	252~328	336~438	168~219	252~328	336~438
Nominal Voltage(V)	192	288	384	192	288	384
Nominal Capacity(Ah)	40					
Max.Charge/Discharge Current(A)	39					
Max.Discharge Power(kW)	7.68	8.8	8.8	7.68	11	11
Max.Charge Power(kW)	7.68	8.8	8.8	7.68	11	11
Max.DOD (Depth of Discharge) (%)	95					
Operating Temperature Range(°C)	0~50					
Cycle Life	≥8000Cycles, 70%SOH					
Alarms	Overcharge/Overdischarge/Overcurrent/Overtemperature/Short Circuit					
Safety Regulation	IEC 62619/IEC 60730					
PV String Input Data	Cygni8.0HS			Cygni10.0HS		
Max.PV Input Power (W)	12000			15000		
Max.PV Input Voltage (V)	600					
Maximum inverter backfeed current to array	0A					
MPPT Range (V)	60-550					
SPS Start-up Voltage (V)	60					
MPPT Voltage Range For Nominal Power (V)	180-500			210-500		

Nominal DC Input Voltage (V)	390	
Max.Input Current (A)	16/16/16	16/16/16
Max.Short Current (A)	23/23/23	23/23/23
No.of MPP Trackers	3	3
No.of Strings per MPP Tracker	1	
AC Output Data(On-grid)	Cygni8.0HS	Cygni10.0HS
Nominal Apparent Power Output to Utility Grid (VA)	8000	9999
Max.Apparent Power Output to Utility Grid (VA)	8000	9999
Max.Power From Grid (VA)	8000	9999
Nominal Output Voltage (V)	230	
Nominal Output Frequency (HZ)	50	
Inrush current (Peak and duration)	135.8A /3us	
Rated/Max.AC Current Output to Grid(A)	34.8	43.5
Rated/Max.AC Current From Grid (A)	34.8	43.5
Maximum output fault current (Peak and duration)	135.8A /3us	
Output Power Factor	Adjustable from 0.8 leading to 0.8 lagging	
Input Icc	≤10kA	
Output THDi (Nominal Power)	<3%	

AC	Cygni8.0HS	Cygni10.0HS
Output Data (Back-up)		
Max.Output Apparent Power(VA)	8000	10000
Peak Output Apparent Power (VA)	9600,60sec	12000,60sec
Rated/Max.Output Current (A)	34.8	43.5
Inrush current (Peak and duration)	135.8A /3us	
Nominal Output Voltage (V)	230 (Without Transformer)	
Nominal Output Frequency(Hz)	50	
Maximum output fault current (Peak and duration)	135.8A /3us	
Output THD v (@Linear Load)	<3%	
Backup ups (ms)	<10	
Generator input	NO	
Efficiency	Cygni8.0HS	Cygni10.0HS
MPPT efficiency	99.9%	
Max.Efficiency	97.5%	
Europe Efficiency	97.0%	
Protection	Cygni8.0HS	Cygni10.0HS
Anti-island Protection	Integrated	
PV String Input Reverse Polarity Protection	Integrated	
Battery Reverse Protection	Integrated	
Residual Current Monitoring Unit	Integrated	
Over Current/Voltage Protection	Integrated	
DC Switch (PV)	Integrated	

Fire Protection System	Built-in aerosol fire extinguisher	
Surge Protection	DC Type II/ AC Type III	
Communication Interface	Cygni8.0HS	Cygni10.0HS
Battery BMS	CAN	
EMS	RS485	
Meter	RS485	
E-Stop	YES (DI)	
Dry-Point	YES (DO)	
Communication	Wi-Fi; Bluetooth	
Display	LCD; APP; Web	
General Data	Cygni8.0HS	Cygni10.0HS
Topology	Non-Isolated	
Operating Temperature Range (°C)	0-50	
Relative Humidity (%)	0-95	
Operating Altitude(m)	3000	
Cooling	Natural Convection	
Noise(dB)	<35	
Installation	Wall hanging & Floor type	
Enclosure Type	IP 66	
Active anti-islanding method	Active frequency perturbation method	
Pollution degree classification	3(External Environment) ,2(Internal Environment)	
-Storage type	Li-Ion	
-Protective class (I, II or III)	Class I	
-Over voltage category (OVC I, II, III or IV)	II(DC), III(AC)	
Inverter topology (Isolated or non-isolated)	Non-isolated	
Ingress protection (IP) rating	IP66	

General Data	Cygni8.0HS		Cygni10.0HS	
	BAT	C	BAT	C
Decisive voltage class	PV	C	PV	C
(DVC)	AC	C	AC	C
	COM	A	COM	A
Maximum inverter backfeed current to the array	0A		0A	
The maximum output overcurrent protection for each AC output port	65A		65A	
AC surge protection	Class III		Class III	
AC Surge Protection Time	20 ns		20 ns	

Technical Specifications

Mode	Weight(kg)	Size(W/H/D)(mm)
Cygni 8.0HS-M2	113.2	650x1130x180
Cygni 8.0HS-M3	153.7	650x1430x180
Cygni 8.0HS-M4	193.7	650x1730x180
Cygni 10.0HS-M2	113.2	650x1130x180
Cygni 10.0HS-M3	153.7	650x1430x180
Cygni 10.0HS-M4	193.7	650x1730x180

Technical Specifications

General Data	Cygni8.0HS	Cygni10.0HS
Warranty (year)	10	
Safety Regulation	IEC 62109-1/2, IEC 62040, IEC 62619:2022	
EMC	IEC/EN 61000-6-1/3, EN 62920:2017/A1:2021	
Grid Regulation	AS/NZS 4777.2: 2020	
Manufacturer	Daqin Digital Energy Technology Co., Ltd.	
Country of Manufacture	China	

Function	Cygni8.0HS	Cygni10.0HS
Protection Parameter Setting	Obtain security codes and corresponding protection parameters by APP.	
Regional Setting	Set security codes of regional settings(Australia, Australia B, Australia C) by APP.	
Anti Backflow Setting	Set anti backflow switch (off, soft limit, hard limit) and limited power by APP.	