



Spider Net 2Plus Series

Transformer-Based Online UPS

Power range: 10-200 KVA

Compliance and Standards

Item	Year	Standard
Safety Requirement	2008	IEC60950-1, IEC62040-1-1
EMC	2005	IEC/EN62040-2
Method for Designing and Testing	1999	IEC62040-3

Environment Condition

Item	Unit	Rated Power(kVA)									
		10	20	30	40	60	80	100	120	160	200
Operating Temperature	°C	0~40									
Highest temperature for working 8 hours per day	°C	40°C de-rate power by 1.5% for every 1°C increase between 40 °C to 50°C									
Highest temperature for working 24 hours per day	°C	Up to 35									
Relative Humidity	-	When 20°C, ≤95%									
Altitude	m	≤1000m a.s.l. de-rate power by 1% per 100m between 1000 and 2000 m									
Storage/Transport Temperature	°C	-25~70									

Mechanical Characteristics

Item	Unit	Rated Power(kVA)									
		10	20	30	40	60	80	100	120	160	200
Width	mm	430			715			890			1200
Depth	mm	832			675			775			800
Height	mm	1105			1405			1600			1600
Net ¹	kg	175	195	230	255	386	426	625	685	780	1030
Mass ¹	kg	208	228	263	288	432	472	695	755	850	1130
Ventilation	-	By internal fan									
Wiring Method	-	Through the bottom of machine									

Note:

1. As the materials used by different manufacturers are different in weight, the net weight and gross weight of the UPS offered above are only for reference. Detailed information is in accordance with the final product.

(Electrical Characteristics (Rectifier Input

Item	Unit	Rated Power(kVA)									
		10	20	30	40	60	80	100	120	160	200
Rated AC Input Voltage	Vac	380/400/415 V									
Type of Input Power		three-phase without neutral									
Input Voltage Range ¹	%	±15, (maxim working range : 290Vac~498Vac)									
Frequency	Hz	50/60 Hz									
Input Frequency Range	Hz	45~65									
Power Stepping Time ²	s	5~300									

Note:

1. Use recommended number of batteries. At the -15% voltage, UPS can guarantee maintaining the specified output voltage at rated load without discharging, but cannot guarantee the float charge voltage for the battery.
2. Set by the diagnosis software.

Electrical Characteristics - DC BUS

Item	Unit	Rated Power (kVA)									
		10	20	30	40	60	80	100	120	160	200
Voltage range for inverter	Vdc	320~490									
Recommended number of lead-acid cells	piece	384									
Recommended floating charge voltage 2.25V/cell	Vdc	432									
Recommended equalizing charge voltage 2.35V/cell	Vdc	451									
Maximum manual charge voltage 2.40V/cell	Vdc	461									
Battery protective voltage 2.45V/cell	Vdc	471									
Maximum duration for equalizing charging ¹	min	480~1800									
Threshold current for equalizing and floating charge ¹	A	0.001C~0.025C									
Ripple voltage ²	%	≤1									

Note:

1. Set up by software.
2. Without being connected to the battery, the percentage of the effective value of ripple voltage to the DC voltage

(Electrical Characteristics - nverter Output)

Item	Unit	Rated Power(kVA)									
		10	20	30	40	60	80	100	120	160	200
Rated Output Voltage ¹	Vac	380/400/415									
Type of Output Power Type	-	three-phase with neutral									
Frequency ²	Hz	50/60									
Rated active power	kW	8	16	24	32	48	64	80	96	128	180
Duration of three-phase overload ³	-	105%≤load<125%, 10min 125%≤load<150%, 1min									
Maximum non-linear load allowed ⁴	-	100%Pn									
voltage stability, steady state test ³	%	±1									
voltage stability, transient state test ⁵	%	±5									
Max rate of change for frequency ⁶	Hz/s	0.1									

Note:

1. Factory setting is 380V, 400V or 415V, which can be set through the software.
2. Factory setting is 50Hz; 60 Hz can be set through the software.
3. IEC62040-3 (5.3.2)
4. IEC62040-3 (ANNEX E)
5. IEC62040-3 (5.3.1), including 0-100-0% load transient. Transient recovery time is 20ms, with an accuracy of 1%
6. Factory setting is 0.1 Hz/s; 1Hz/s can be set through the software.

Number of Batteries

Type	10~200KVA
number of Batteries (standard)	384
Cut-off voltage of discharge	320V
float charge voltage	432V
equalized charge voltage	451V

Electrical Characteristics - Bypass Input

Item	Unit	Rated Power(kVA)									
		10	20	30	40	60	80	100	120	160	200
Rated Voltage ¹	Vac	380/400/415									
Power Type	-	three-phase with neutral									
Rated Current 380 Vac 400 Vac 415 Vac	A	15	30	46	60	92	120	152	182	242	303
		14	29	44	58	88	108	145	174	232	290
		13	28	42	56	84	104	139	167	222	278
Bypass Voltage Tolerance ²	%	Default upper limit 20%, default lower limit -40%									
Confirmation time for bypass voltage recovery	s	2									
Inverter Output Voltage window	%	±5									
Frequency ³	Hz	50/60									
Input Frequency Tolerance ⁴	%	±10									
Max change rate of synch frequency	Hz/s	1									
Current rating of neutral cable	-	1.3In									
Protection, bypass	-	External protector to be installed at the input distribution system of bypass, and its capacity should be distinguished from that of load protection.									

Note:

1. Factory setting is 380V. 400V or 415V can be set through the software.
2. Other values between -40%~20% can be set up through the software.
3. Factory setting is 50Hz; 60 Hz can be set through the software.
4. Other values between ±5% can be set through the software.