

smartnet

PASSIVE NETWORK COMPONENTS



CABINET & ACCESSORIES

AS/AD/A1/A2/A3 Server/Networking Cabinets



AS front door



A1 front door



A2 front door



AD front door



A3 front door



Rear door with hexagonal holes



High-density vented rear door








Double-section high-density vented plate door








Double-section high-density vented door

Meaning of second order No. (front door)

AS. ■■■■ ■■■■	AD. ■■■■. ■■■■	A1. ■■■■. ■■■■	A2. ■■■■. ■■■■	A3. ■■■■. ■■■■
AS front door (tempered glass door & vented door border)	AD front door (hexagonal reticular high-density vented door)	Steel front door (without holes)	A2 front door (toughened glass door & plate door border)	A3 front door (hexagonal reticular high density vented plate door)
				

Meaning of last second order no. (rear door)

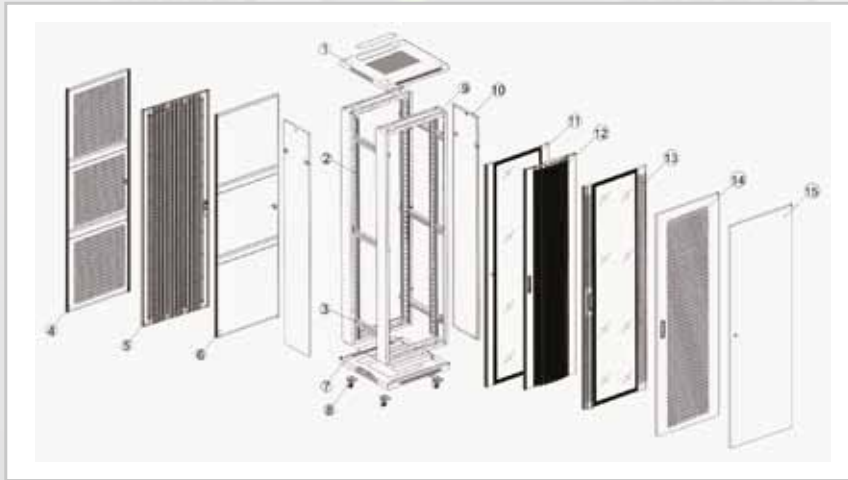
■■ ■■■■. ■0■■	■■ ■■■■. ■1■■	■■ ■■■■. ■2■■	■■ ■■■■. ■3■■	■■ ■■■■. ■4■■
Plate rear door without holes	rear door with hexagonal holes	High-density vented rear door	Double-section rear door	Double-section high-density vented door
				

Optional accessories

Specification	Model No.	Packs of	Unit	Material	Surface finish	Remark
Fan unit with thermostat	Refer to accessory list	1	Set	Body SPCC	Powder coated	....
Thermostat	Refer to accessory list	1	Set	Body SPCC	Powder coated	....
PDU (Germany)	Refer to accessory list	1	Piece	....	....	....
PDU (UL)	Refer to accessory list	1	Piece	....	....	....
PDU	Refer to accessory list	1	Piece	....	....	....
Plinth	Refer to accessory list	1	Set	T1.2/T3.0 SPCC	Powder coated	....
Filter for fan unit	Refer to accessory list	2	Set	ABS	....	....
Fixed shelf	Refer to accessory list	1	Piece	T1.2 SPCC	Powder coated	....
Square screw & nut	Refer to accessory list	10	Set	Steel	Color Zinc	....

Width 600mm AS/AD/A1/A2/A3 Server/Networking Cabinets

Structure of width 600mm AS,AD,A1,A2,A3 cabinet structure



1. Top cover 2. Mounting profile 3. Mounting angle 4. Door with hexagonal holes 5. High-density vented door
 6. Steel door without hole 7. Bottom panel 8. 2" heavy duty castor 9. Frame 10. Side panel 11. A2 front door
 12. AD front door 13. AS front door 14. A3 front door 15. A1 front door



Removable front door



U mark mounting rail



Adjustable mounting profile & mounting angle



Shunting rail



1U/2U metal cable management with cap



Symmetrical frame structure



Main parts with earthing kits can connect with each other



Earth studs on top & bottom covers



Keyboard tray with mouse panel



Optional plinth to meet under-base wiring, ventilation & rat-proof



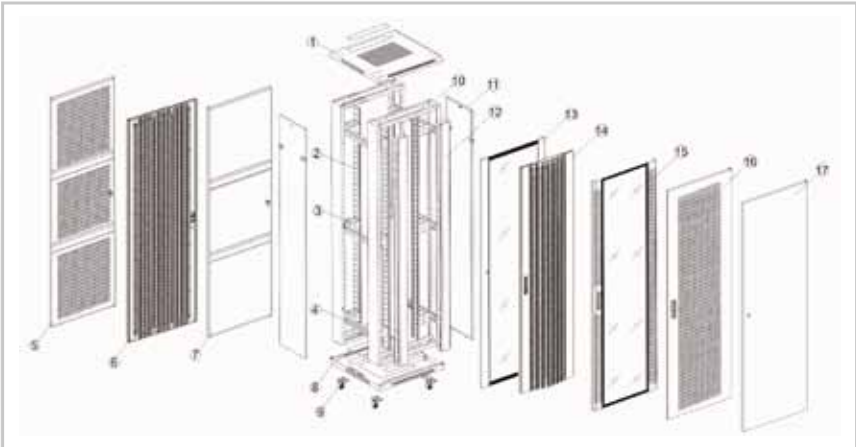
Earthing kit



Lockable cable entry

Width 800mm AS/AD/A1/A2/A3 Server/Networking Cabinets

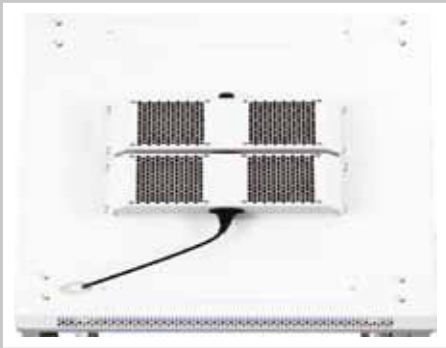
Structure of width 800mm AS,AD,A1,A2,A3 cabinet structure



- 1. Top cover
- 2. Mounting profile
- 3. Spacer
- 4. Mounting angle
- 5. Rear door with hexagonal holes
- 6. High-density vented rear door
- 7. Steel rear door without hole
- 8. Bottom panel
- 9. 2" heavy duty castor
- 10. Frame
- 11. Side panel
- 12. Cable management tool
- 13. A2 front door
- 14. AD front door
- 15. AS front door
- 16. A3 front door
- 17. A1 front door



Width 800mm A2 cabinet with metal cable management slot



Top installation fan unit (optional)



metal cable management slot with cap

AS server cabinets



Model No.	WxD	Capacity
AS6842.7100	600x800	42U

Standards:

- Comply with ANSI/EIA RS-310-D, IEC297-2, DIN41494;PART1 DIN41494;PART7, ETSI standard.

Features:

- Exquisite design with precise dimension and craftsmanship;
- Toughened glass door with silk-screened flower pattern, vented front door border and rear door;
- Blue Zinc Mounting Profiles free of static;
- Adjustable feet and heavy duty castors are available simultaneously;
- Cable entry on the top cover and bottom panel with adjustable sizes;
- Optional installation of plinth to enable cabinets fixation, under-base cable entry/ventilation;
- Efficient and reliable cabinet connection by buying kit;
- Removable side panels to ease maintain;
- Around 1/3 assembled original volume when flat pack .

Material:

- SPCC cold rolled steel;
Thickness:mounting profile 2.0mm, mounting angle 1.5mm, others 1.2mm.

Surface finish:

- Degreasing, phosphoric, powder coated;

Degree of protection:

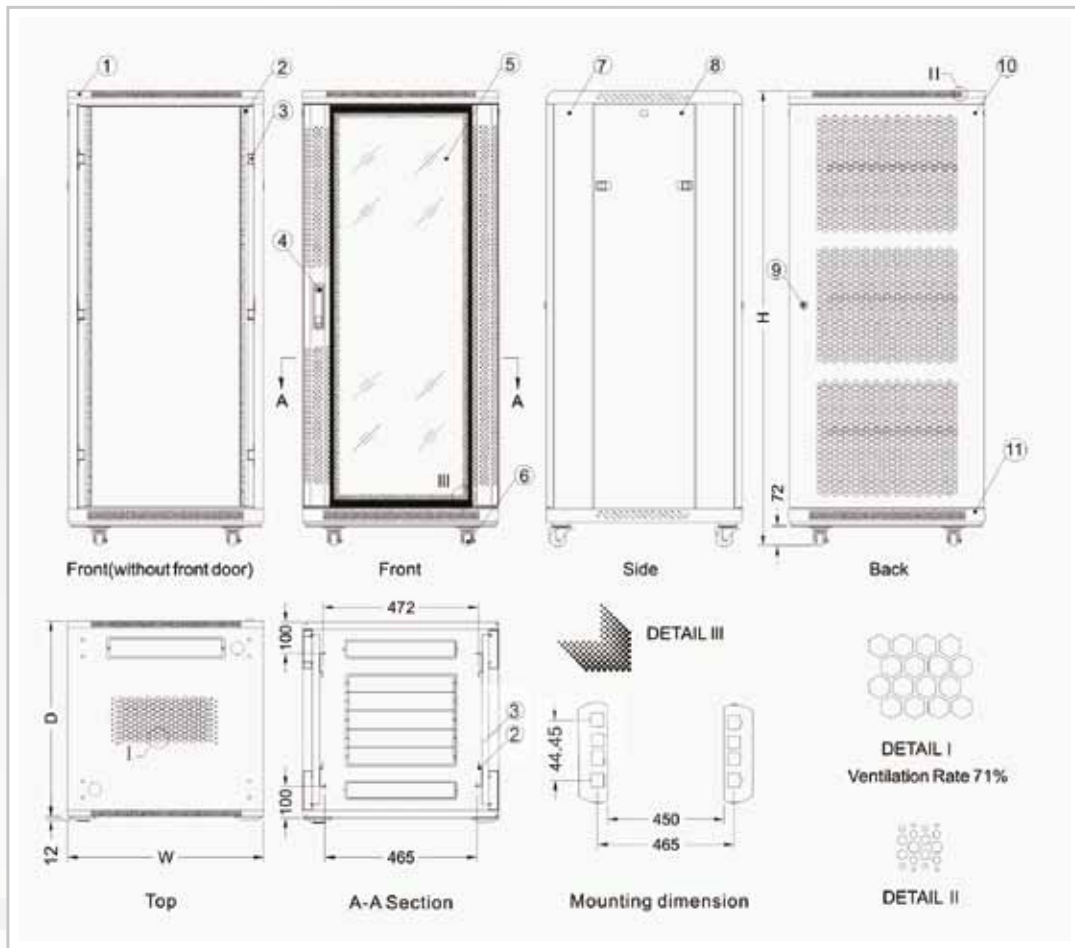
- IP20

Loading capacity:

- Static loading: 800KG

Width 600mm AS Server Cabinets

Main dimension

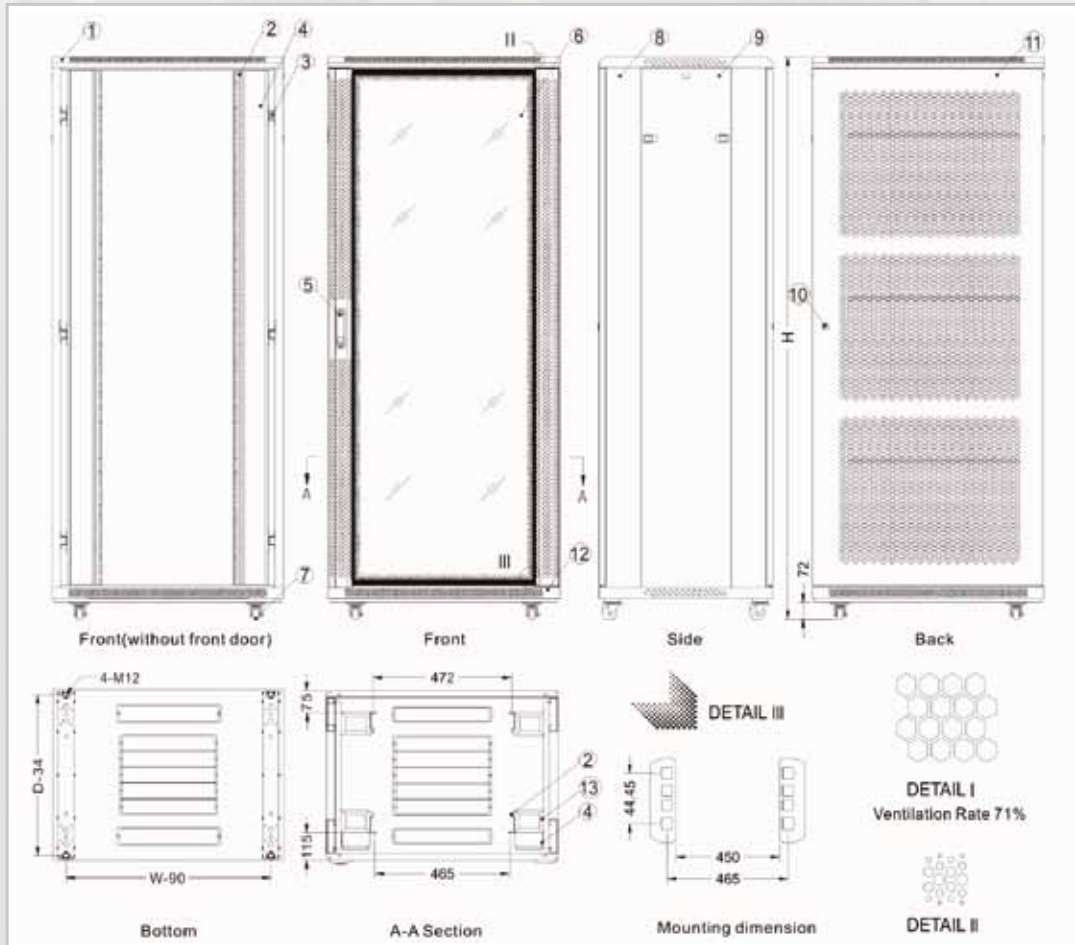


Main parts:

S/N	Specification	Quantity	Unit	Material	Surface finish	Remark
1	Top cover	1	Piece	SPCC cold rolled steel t1.2	Powder coated	....
2	Mounting profile	4	Piece	SPCC cold rolled steel t2.0	Blue zinc	....
3	Mounting angle	6	Piece	SPCC cold rolled steel t1.5	Powder coated	4pcs for lower 32U
4	Spring lock	1	Piece	....	Black	With 2 keys
5	Toughened glass front door	1	Piece	Toughened glass/SPCC t1.2	Powder coated	Round vented border
6	2" heavy duty castor	4	Piece	....	....	....
7	Frame	2	Piece	SPCC cold rolled steel t1.2	Powder coated	....
8	Side panel	2	Piece	SPCC cold rolled steel t1.2	Powder coated	....
9	Small round lock	1	Piece	....	Nickel coated	With 2 keys
10	Hexagonal-hole rear door	1	Piece	SPCC cold rolled steel t1.2	Powder coated	Hexagonal vent
11	Bottom panel	1	Piece	SPCC cold rolled steel t1.2	Powder coated	....
12	M6 B-head screw	20	Piece	Steel	Color zinc	40pcs for over 32U
13	M6 square nut	20	Piece	Steel	Color zinc	40pcs for over 32U
14	Allen wrench	1	Piece	Steel	Black	....
15	M12 adjustable feet	4	Piece	....	....	....

Width 800mm AS Server Cabinets

Main dimension



Main parts:

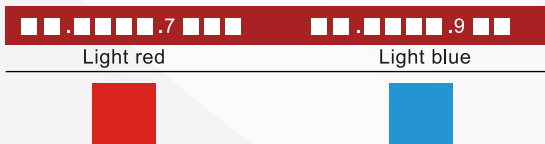
S/N	Specification	Quantity	Unit	Material	Surface finish	Remark
1	Top cover	1	Piece	SPCC Cold rolled steel t1.2	Powder coated	....
2	Mounting profile	4	Piece	SPCC Cold rolled steel t2.0	Blue zinc	....
3	Mounting angle	6	Piece	SPCC Cold rolled steel t1.5	Powder coated	4pcs for lower 32U
4	Cable managment slot	2	Piece	SPCC Cold rolled steel t1.8	Powder coated	....
5	Spring lock	1	Piece	....	Black	With 2 keys
6	Toughened glass front door	1	Piece	Toughened glass/SPCCt1.2	Powder coated	Round vented border
7	2" heavy duty castor	4	Piece	....	....	....
8	Frame	2	Piece	SPCC Cold rolled steel t1.2	Powder coated	....
9	Side panel	2	Piece	SPCC Cold rolled steel t1.2	Powder coated	....
10	Small round lock	1	Piece	....	Nickel coated	with 2 keys
11	Hexagonal-hole rear door	1	Piece	SPCC Cold rolled steel t1.2	Powder coated	Hexagonal vent
12	Bottom panel	1	Piece	SPCC Cold rolled steel t1.2	Powder coated	....
13	Spacer	12	Piece	SPCC Cold rolled steel t1.2	Powder coated	8pcs for over 32U
14	M6 B-head screw	20	Piece	Steel	Color Zinc	40pcs for over 32U
15	M6 square nut	20	Piece	Steel	Color Zinc	40pcs for over 32U
16	Allen wrench	1	Piece	Steel	Black	....
17	M12 adjustable feet	4	Piece	....	....	....

AS Server Cabinets

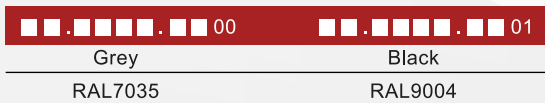
Specification

Model No.	Capacity (U)	Width (mm)	Depth (mm)	Height (mm)	Packing Dimension	Volum (CBM)
AS.6618.■1■	18	600	600	988	670*670*1028	0.4615
AS.6818.■1■			800		670*870*1028	0.5992
AS.6018.■1■			1000		670*1070*1028	0.7370
AS.6622.■1■	22	600	600	1166	670*670*1196	0.5369
AS.6822.■1■			800		670*870*1196	0.6971
AS.6022.■1■			1000		670*1070*1196	0.8574
AS.6627.■1■	27	600	600	1388	670*670*1418	0.6460
AS.6827.■1■			800		570*870*1418	0.8266
AS.6027.■1■			1000		670*1070*1418	1.0166
AS.6632.■1■	32	600	600	1610	670*670*1640	0.7362
AS.6832.■1■			800		670*870*1640	0.9560
AS.6032.■1■			1000		670*1070*1640	1.1757
AS.6637.■1■	37	600	600	1833	670*670*1863	0.8363
AS.6837.■1■			800		670*870*1863	1.0859
AS.6037.■1■			1000		670*1070*1863	1.3356
AS.6237.■1■			1200		670*1270*1863	1.5852
AS.6642.■1■	42	600	600	2055	670*670*2085	0.9360
AS.6842.■1■			800		670*870*2085	1.2153
AS.6042.■1■			1000		670*1070*2085	1.4947
AS.6242.■1■			1200		670*1270*2085	1.7741
AS.8642.■1■		800	600		870*670*2085	1.2513
AS.8842.■1■			800		870*870*2085	1.5781
AS.8042.■1■			1000		870*1070*2085	1.9409
AS.8242.■1■			1200		870*1270*2085	2.3037
AS.6647.■1■	47	600	600	2277	670*670*2307	1.0356
AS.6847.■1■			800		670*870*2307	1.3448
AS.6047.■1■			1000		670*1070*2307	1.6539
AS.6247.■1■			1200		670*1270*2307	1.9630
AS.8647.■1■		800	600		870*670*2307	1.3448
AS.8847.■1■			800		870*870*2307	1.7462
AS.8047.■1■			1000		870*1070*2307	2.0673
AS.8247.■1■			1200		870*1270*2307	2.5490

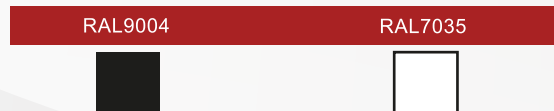
Definition of ornament strip color



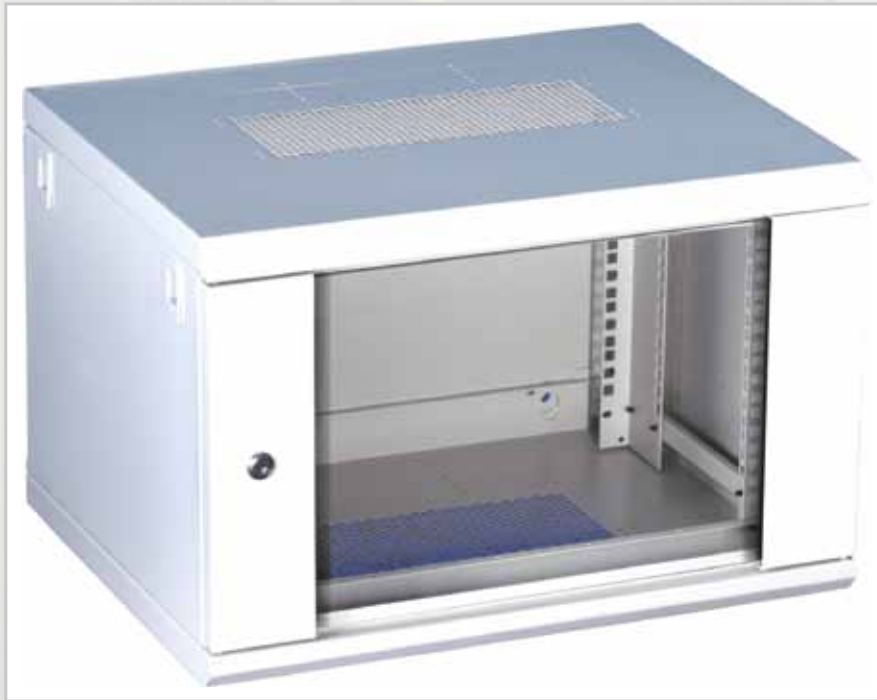
Definition of body color



Color



W8 Wall Mounted Cabinets



Model No.	WxD	Capacity
W86406.9002	600x450	6U

Standards:

- Comply with ANSI/EIA RS-310-D, IEC297-2, DIN41494;PART1 DIN41494;PART7, GB/T3047.2-92 standard.

Features:

- Knock down structure, flat pack could reduce package volume up to 70%
- Save half cost of shipping and storage
- Easily be assembled in 5 minutes
- 19" standard installation
- Easy mounting installation (patent)
- Knock out hole for entering cable on both of top cover and bottom panel
- Top installation fan unit (optional)
- Turning angle of front door is over 180 degrees

Loading capacity:

- 60 KG

Material:

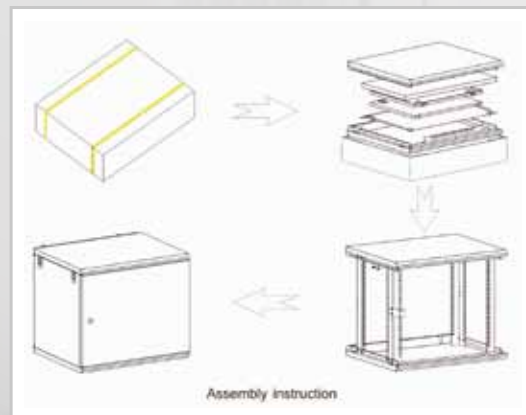
- SPCC cold rolled steel;
Thickness:mounting profile 1.5mm, side panel .8mm, others 1.2mm.

Surface finish:

- Degreasing, phosphoric, powder coated;

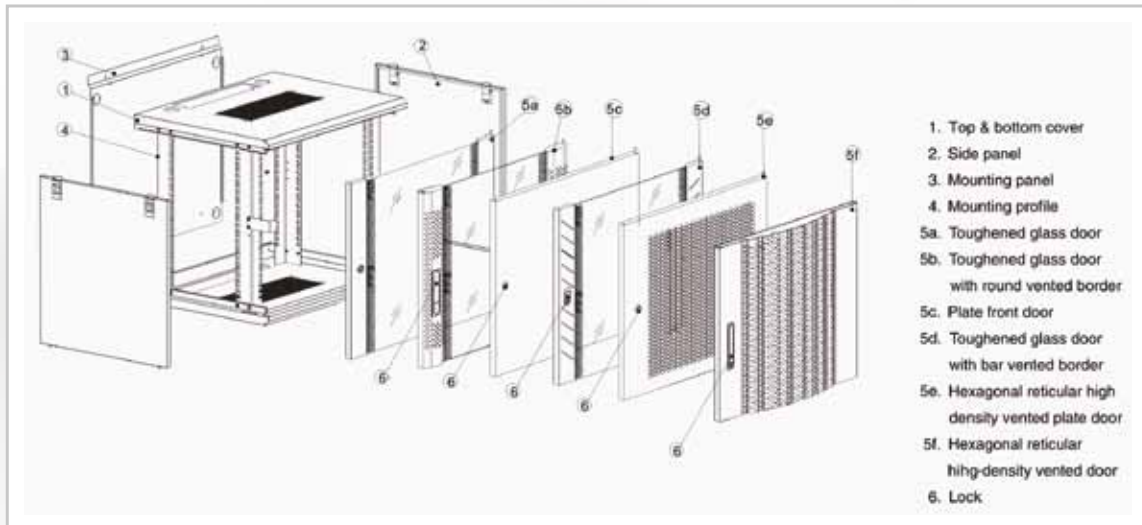
Degree of protection:

- IP20

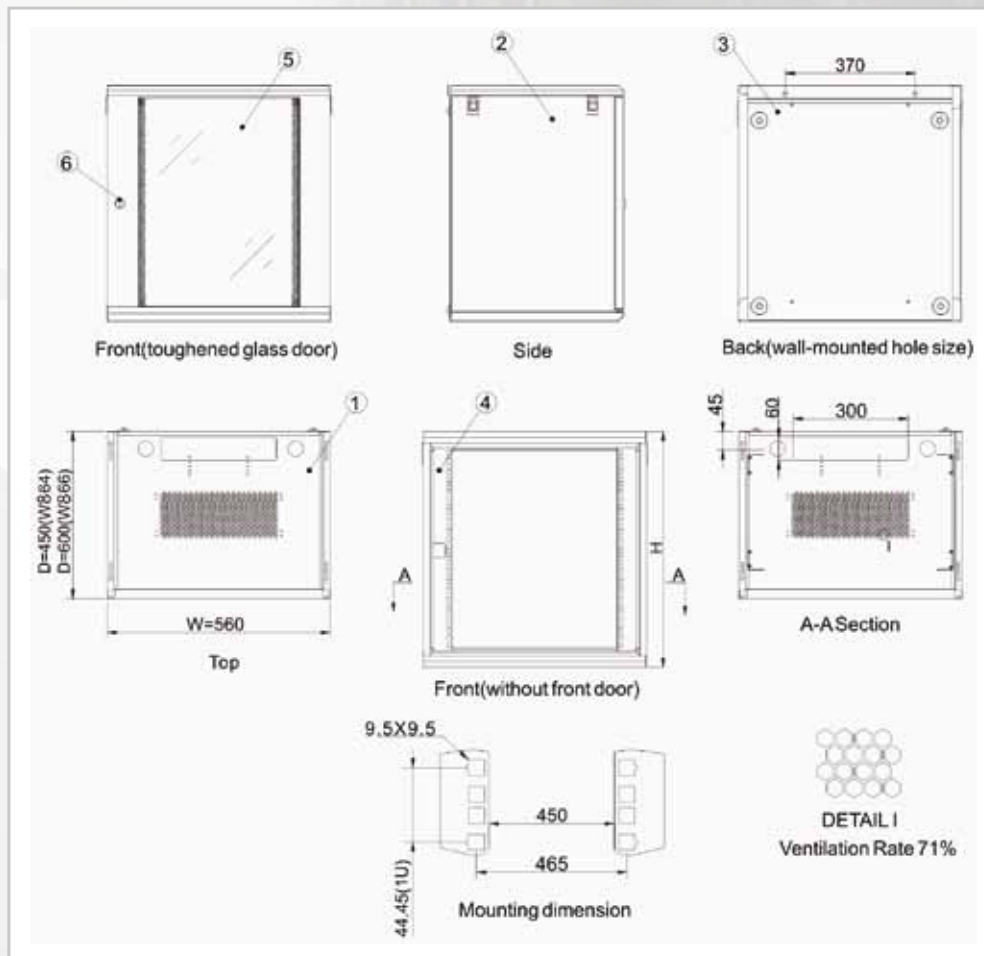


W8 Wall Mounted Cabinets

Main structure:



Main dimension:



W8 Wall Mounted Cabinets

Main parts:

S/N	Specification	Quantity	Unit	Material	Surface finish	Remark
1	Top & bottom cover	2	Piece	SPCC Cold rolled steel t1.2	Powder coated	....
2	Side panel	2	Piece	SPCC Cold rolled steel t0.8	Powder coated	....
3	Mounting panel	1	Piece	SPCC Cold rolled steel t1.2	Powder coated	....
4	Mounting profile	4	Piece	SPCC Cold rolled steel t1.5	Powder coated	....
5	Front door ^①	1	Piece	5MM Toughened glass door/SPCCt1.2	Powder coated	....
6	Lock ^②	1	Piece	....	....	With 2 keys
7	M6 square nut	10	Piece	Steel	Color Zinc	20pcs for over 32U
8	M6 B-head screw	10	Piece	Steel	Color Zinc	20pcs for over 32U
9	Allen wrench	1	Piece	Steel	Black	....



Remark: ① Six types of front door toughened glass door, toughened glass door with round vented door border, toughened glass door border, plate front door, hexagonal reticular high density vented plate door, hexagonal reticular high-density vented door

② Toughened glass door, hexagonal reticular high density vented plate door, and plate front door with small round lock, toughened glass door with round vented door border and hexagonal reticular high-density vented door with spring lock toughened glass door with bar vented door border with monn-shaped lock

Specification

Model No.	Capacity (U)	Width (mm)	Depth (mm)	Height (mm)	Packing Dimension	Volum (CBM)
W8.6406.■■■■■	6	560	450	368	595*510*135	0.0410
W8.6606.■■■■■			600		595*660*135	0.0530
W8.6409.■■■■■	9	560	450	501	595*560*235	0.0783
W8.6609.■■■■■			600		595*660*135	0.0530
W8.6412.■■■■■	12	560	450	635	595*690*235	0.0965
W8.6612.■■■■■			600		595*690*235	0.0965
W8.6415.■■■■■	15	560	450	769	595*825*235	0.1154
W8.6615.■■■■■			600		595*825*235	0.1154
W8.6418.■■■■■	18	560	450	901	595*960*185	0.1057
W8.6618.■■■■■			600		595*960*235	0.1342
W8.6422.■■■■■	22	560	450	1082	595*1135*185	0.1249
W8.6622.■■■■■			600		595*1135*235	0.1587
W8.6427.■■■■■	27	560	450	1304	595*136*185	0.1497
W8.6627.■■■■■			600		595*1360*185	0.1497



Color

RAL9004	RAL7035
Black	Grey
	

Definition of front door

Model No.	Color
W8.■■■■■.■0■■■	Toughened glass door
W8.■■■■■.■1■■■	Toughened glass door with round vented border
W8.■■■■■.■2■■■	Plate front door
W8.■■■■■.■5■■■	Toughened glass door with bar vented border
W8.■■■■■.■6■■■	Hexagonal reticular high density vented plate border
W8.■■■■■.■7■■■	Hexagonal reticular high density vented border

Definition of ornament strip color
(for toughened glass door with vented door border):

W8.■■■■■.7■■■	W8.■■■■■.9■■■
Light red	Light blue
	

Definition of body color

Model No.	Color
W8.■■■■■.■■01	RAL9004
W8.■■■■■.■■02	RAL7035

WM Single/ZH Double Section Wall Mounted Cabinets

WM front door :



Plate front door
WM. ■■■■■. ■2■■■



Toughened glass door
WM.■■■■■.■0■■■



Hexagonal reticular
high-density vented door
WM.■■■■■.■7■■■



Toughened glass door
with bar vented border
WM. ■■■■■. ■5■■■



Toughened glass door
round vented border
WM. ■■■■■. ■1■■■



Hexagonal reticular
high-density vented plate door
WM. ■■■■■. ■6■■■

ZH Front Door :



Plate front door
ZH. ■■■■■. ■2■■■



Toughened glass door
ZH. ■■■■■. ■0■■■



Hexagonal reticular
high-density vented door
ZH. ■■■■■. ■7■■■



Toughened glass door
with bar vented border
ZH. ■■■■■. ■5■■■



Toughened glass door
round vented border
ZH. ■■■■■. ■1■■■



Hexagonal reticular
high-density vented plate door
ZH. ■■■■■. ■6■■■

WM Single Section Wall Mounted Cabinets



Standards:

- Comply with ANSI/EIA RS-310-D, DIN41497 part 1, IEC297-2, DIN41494 part 7, GB/T3047.2-92 standard.

Features:

- Welded frame, reliable structure.
- Standing or wall mounting installation.
- Adjustable feet and heavy duty castors are optional.
- Easy mounting installation (patent).
- 19" standard installation.
- Removable side panels, side locks optional.
- Knock out hole for entering cable on both of top cover and bottom panel.
- 120mm fan (optional).
- Turning angle of front door is over 180 degrees.

Loading capacity:

- Static loading: 30KG

Material:

- SPCC cold rolled steel;
- Thickness, Mounting profile: 1.5mm, others: 1.2mm.

Surface finish:

- Degreasing, phosphoric, powder coated;

Degree of protection:

- IP20

Model No.	WxD	Capacity
WM6409.9002	600x450	9U



Top installation fan unit (optional)



Removable side panels (side locks optional)



Install to wall



Easy installation dust-proof



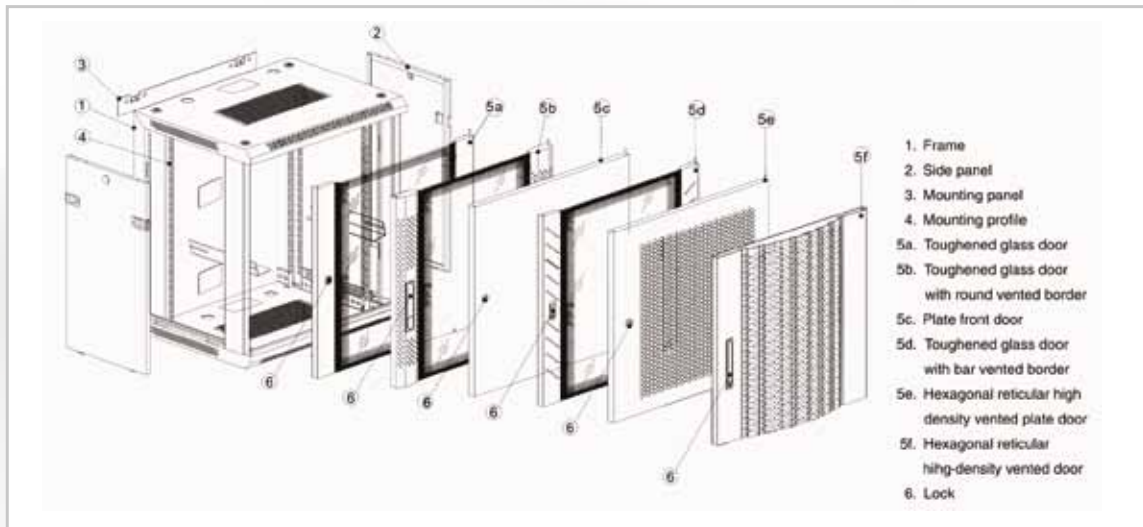
Mounting panel



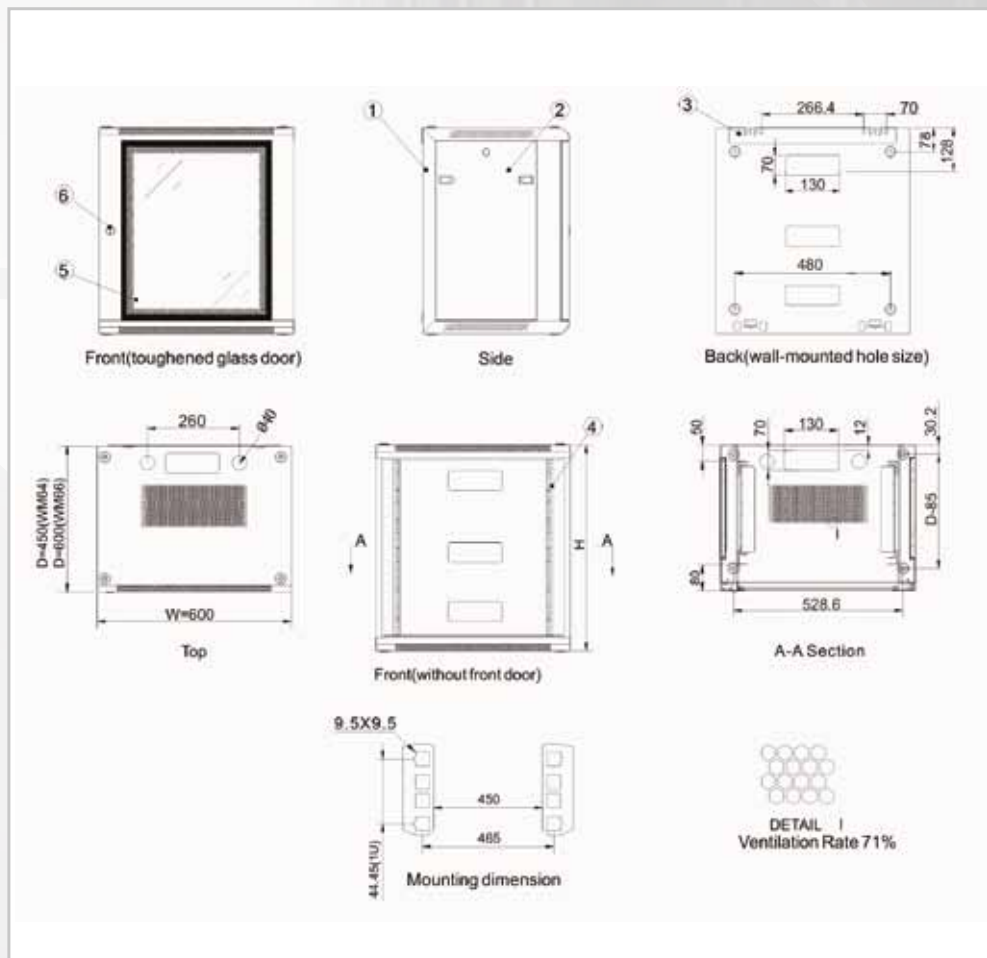
Inside fixation by nuts to avoid accident

WM Single Section Wall Mounted Cabinets

Main structure:



Main dimension:



WM Single Section Wall Mounted Cabinets

Main parts:

S/N	Specification	Quantity	Unit	Material	Surface finish	Remark
1	Frame	1	Piece	SPCC Cold rolled steel t1.2	Powder coated	....
2	Side panel	2	Piece	SPCC Cold rolled steel t1.2	Powder coated	....
3	Mounting panel	1	Piece	SPCC Cold rolled steel t1.2	Powder coated	....
4	Mounting profile	4	Piece	SPCC Cold rolled steel t1.5	Powder coated	....
5	Front door ^①	1	Piece	5MM Toughened glass/SPCC t1.2	Powder coated	....
6	Lock ^②	1	Piece	....	.....	With 2 keys
7	M6 Square nut	10	Piece	Steel	Color Zinc	20pcs for over 15U
8	M6 B-head screw	10	Piece	Steel	Color Zinc	20pcs for over 15U
9	Allen wrench	1	Piece	Steel	Black	....

Remark: ① Six types of front door: toughened glass door, toughened glass door with round vented door border, toughened glass door with bar vented door border, plate front door, hexagonal reticular high density vented plate door, hexagonal reticular high-density vented door.



② Toughened glass door, hexagonal reticular high density vented plate door, and plate front door with small round lock, toughened glass door with round vented door border and hexagonal reticular high-density vented door with spring lock; toughened glass door with bar vented door border with moon-shaped lock.

Specification

Model No.	Capacity (U)	Width (mm)	Depth (mm)	Height (mm)	Packing Dimension	Volum (CBM)
WM.6406.■■■■■	6	800	450	368	670*520*430	0.1498
WM.6606.■■■■■			600		670*670*430	0.1930
WM.6409.■■■■■	9	600	450	501	670*520*560	0.1951
WM.6609.■■■■■			600		670*670*560	0.2513
WM.6412.■■■■■	12	600	450	635	670*520*695	0.2421
WM.6612.■■■■■			600		670*670*695	0.3106
WM.6415.■■■■■	15	600	450	769	670*520*830	0.2888
WM.6615.■■■■■			600		670*670*830	0.3725
WM.6418.■■■■■	18	600	450	901	670*520*960	0.3344
WM.6618.■■■■■			600		670*670*960	0.4309
WM.6422.■■■■■	22	600	450	1082	670*520*1140	0.3971
WM.6622.■■■■■			600		670*670*1140	0.5117
WM.6427.■■■■■	27	600	450	1304	670*520*1365	0.4755
WM.6627.■■■■■			600		670*670*1365	0.6127

Remark: Above packing dimension and volume is for packing with PU foam on four angles. If no PU foam the packing dimension should decrease 50mm, 50mm, 40mm accordingly, so does the volume.

Color

RAL9004	RAL7035
Black	Grey
	

Definition of ornament strip color (for toughened glass door with vented door border):

WM.■■■■■.7■■■■■	WM.■■■■■.9■■■■■
Light red	Light blue
	

Definition of front door

Model No.	Color
WM.■■■■■.0■■■■■	Toughened glass door
WM.■■■■■.1■■■■■	Toughened glass door with round vented border
WM.■■■■■.2■■■■■	Plate front door
WM.■■■■■.5■■■■■	Toughened glass door with bar vented border
WM.■■■■■.6■■■■■	Hexagonal reticular high density vented plate border
WM.■■■■■.7■■■■■	Hexagonal reticular high density vented border

Definition of body color

Model No.	Color
WM.■■■■■.■■■■■01	RAL9004
WM.■■■■■.■■■■■02	RAL7035

ZH Double Section Wall Mounted Cabinets



Standards:

- Comply with ANSI/EIA RS-310-D, DIN41497 part 1, IEC297-2, DIN41494 part 7, GB/T3047.2-92 standard.

Model No.	WxD	Capacity
ZH6409.9002	600x550	9U

Features:

- Double section welded frame structure;
- Easy operation and maintaining at the back;
- 19" standard installation.
- Removable side panels, side locks are optional, easy installing and maintaining
- Knock out hole for entering cable on both of top cove and bottom panel;
- 120mm fan (optional);
- Turning angle of front door is above 180 degrees;
- Turning angle of rear door is above 90 degrees

Loading capacity:

- 60KG

Material:

- SPCC cold rolled steel;
- Thickness, Mounting profile: 1.5mm, others: 1.2mm.

Surface finish:

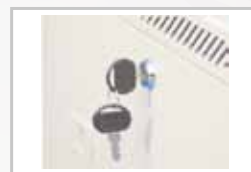
- Degreasing, phosphoric, powder coated;

Degree of protection:

- IP20



No side door lock (standard)



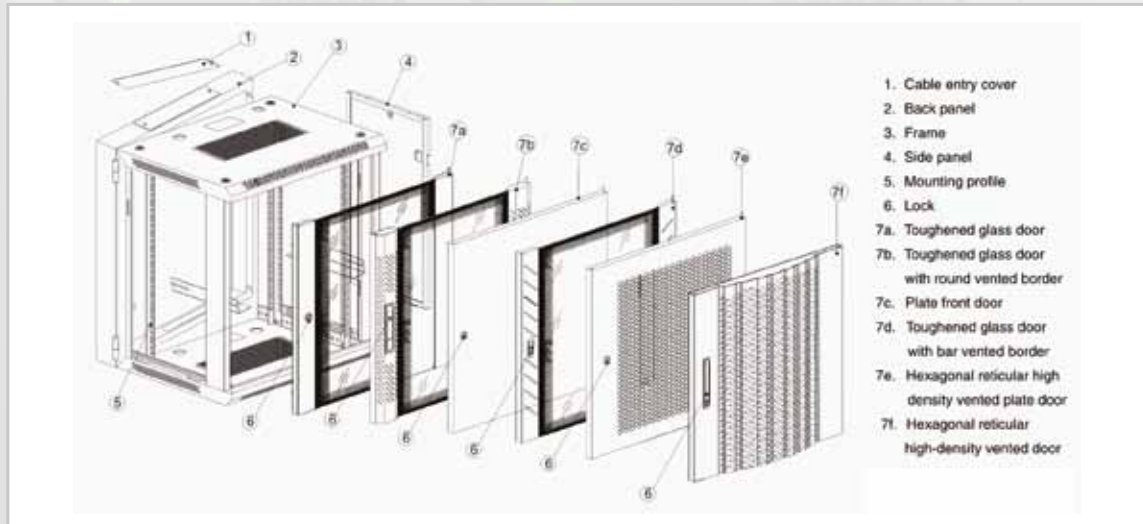
Side door lock (optional)



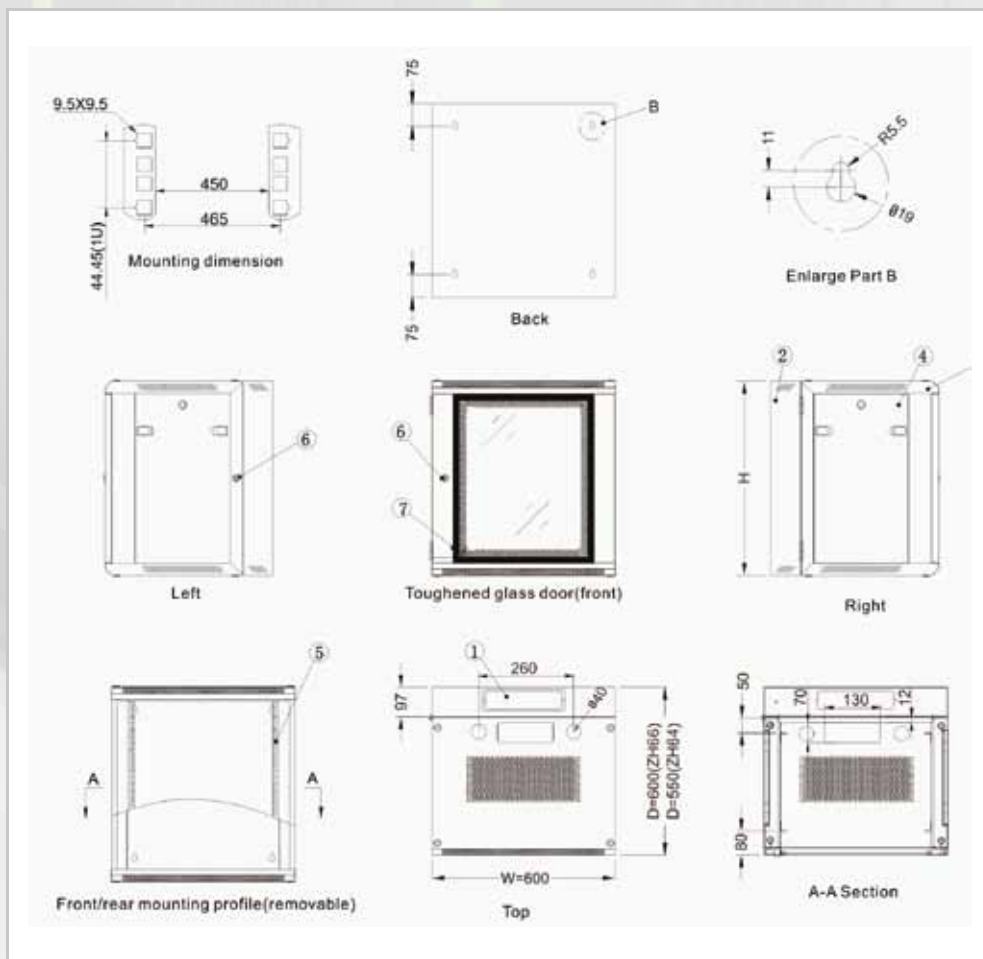
Adjustable mounting profiles

ZH Double Section Wall Mounted Cabinets

Main structure:



Main dimension:



ZH Double Section Wall Mounted Cabinets

Main parts:

S/N	Specification	Quantity	Unit	Material	Surface finish	Remark
1	Cable entrance cover	31	Piece	SPCC Cold rolled steel t1.2	Powder coated	....
2	Back panel	1	Piece	SPCC Cold rolled steel t1.2	Powder coated	....
3	Frame	1	Piece	SPCC Cold rolled steel t1.2	Powder coated	....
4	Side panel	2	Piece	SPCC Cold rolled steel t1.2	Powder coated	....
5	Mounting profile	4	Piece	SPCC Cold rolled steel t1.5	Powder coated	....
6	Lock ^①	2	Piece	....	....	With 2 keys
7	Front door ^②	1	Piece	5MM Toughened glass/SPCCt1.2	Powder coated	....
8	M6 Square nut	10	Piece	Steel	Color Zinc	20pcs for over 15U
9	M6 B-head screw	10	Piece	Steel	Color Zinc	20pcs for over 15U
10	Allen wrench	1	Piece	Steel	Black	....

Remark: ① Six types of front door: toughened glass door, toughened glass door with round vented door border, toughened glass door with bar vented door border, plate front door, hexagonal reticular high density vented plate door, hexagonal reticular high-density vented door.



② Toughened glass door, hexagonal reticular high density vented plate door, and plate front door with small round lock, toughened glass door with round vented door border and hexagonal reticular high-density vented door with spring lock; toughened glass door with bar vented door border with moon-shaped lock.

Specification



Model No.	Capacity (U)	Width (mm)	Depth (mm)	Height (mm)	Packing Dimension	Volum (CBM)
ZH.6406.■■■■■	6	600	550	368	670*620*430	0.1786
ZH.6409.■■■■■	9			501	670*620*560	0.2326
ZH.6412.■■■■■	12			635	670*620*695	0.2887
ZH.6415.■■■■■	15			769	670*620*830	0.3447
ZH.6418.■■■■■	18			901	670*620*960	0.3987
ZH.6422.■■■■■	22			1082	670*620*1140	0.4736
ZH.6427.■■■■■	27			1304	670*620*1365	0.5670
ZH.6606.■■■■■	6	600	600	368	670*670*430	0.1930
ZH.6609.■■■■■	9			501	670*670*560	0.2513
ZH.6612.■■■■■	12			635	670*670*695	0.3106
ZH.6615.■■■■■	15			769	670*670*830	0.3725
ZH.6618.■■■■■	18			901	670*670*960	0.4309
ZH.6622.■■■■■	22			1082	670*670*1140	0.5117
ZH.6627.■■■■■	27			1304	670*670*1365	0.6127

Remark: Above packing dimension and volume is for packing with PU foam on four angles. If no PU foam the packing dimension should decrease 50mm, 50mm, 40mm accordingly, so does the volume.

Color

RAL9004	RAL7035
Black	Grey
	

Definition of ornament strip color
(for toughened glass door with vented door border):

■■■■■■■■.7■■■■	■■■■■■■■.9■■■■
Light red	Light blue
	

Definition of front door

Model No.	Color
ZH.■■■■■■.■0■■■	Toughened glass door
ZH.■■■■■■.■1■■■	Toughened glass door with round vented border
ZH.■■■■■■.■2■■■	Plate front door
ZH.■■■■■■.■5■■■	Toughened glass door with bar vented border
ZH.■■■■■■.■6■■■	Hexagonal reticular high density vented plate border
ZH.■■■■■■.■7■■■	Hexagonal reticular high density vented border

Definition of body color

Model No.	Color
ZH.■■■■■■.■■01	RAL9004
ZH.■■■■■■.■■02	RAL7035

TC Digital Temperature Unit



Feature :

- Simple structure, easy installation
- Easy cabling & operation
- Disturbing resistance, reliable running
- 2-way output

Function :

- Adjust inner cabinet's temperature by intelligent control through fan unit.

Degree of Protection :

- IP23

Main parameter :

S/N	Specification	Parameter
1	Temperature range	0°C~50°C
2	Input	PTC (10KΩ)
3	Output	2-way output
4	Consumption	3W
5	Power supply	220VAC
6	Accuracy	±1°C
7	Display	2 way 8 section digital pipe, red
8	Ambient temperature	-10°C~70°C
9	Maintain temperature	-20°C~80°C
10	Ambient humidity	≤85 % RH
11	Installation	19" standard

Instruction :

■ Connection / wiring

Steps:

1. Connect the temperature sensor to the sensor of temperature controlling unit.
2. Connect the outside fan to the fan plug with special cable.
3. Connect the outside power to the power plug of temperature controlling unit with special cable.

■ Operation

When complete all the connection steps above and confirm the connection is ok, then turn on the switch on the temperature controller and adjust the control parameter to appropriate temperature.

■ Operation of the temperature controller :

1. Look over and set parameter

- ① Look over parameter. Under the state of non-setting, pressing key ▲ show setting value of temperature . Pressing key ▼ display the different between the present temperature and temperature located, 2 seconds later, the screen will show the present temperature.

② Set parameter

- Method of entering into the state of customer setting: under non-setting state, press " SET " key longer than 5 seconds to enter customer state of setting up, setting indicator to be on and to show the temperature at present.
- Method of temperature setting: under the state of customer setting , press ▲ upwards or ▼ downwards to adjust the temperature. Press one time to adjust 1 degree. It will be changed into rapid adjusting after pressing on it over 2 seconds.
- The method of exit from the state of customer setting: Press SET key over 5 seconds or no any operation within 30 seconds under state of customer setting, system will store current setting value and return to normal working condition.
- Method of entering administrator's menu : under state of non-setting , pressing " SET " and ▲ over 5 seconds at the same time to enter administrator's menu . Then setting light will be on to show the item: F1 to setting.
- The method of altering setting items and entering into state of parameter setting : Under setting state, press ▲ upward or ▼ downward to adjust setting item from F0 to F1 .If setting item is F0, it would be invalid to press ▼.To press ▲ is invalid when setting item is F1. Pressing ▲ or ▼ adjust into state of altering parameter of this setting item. Meanwhile, digital tube displays setting practical value this moment.
- The method of altering parameter and return to state of setting value : Under state of parameter value .pressing or adjust parameter value .pressing ▼ is invalid when parameter value is minimum . When parameter reach max value , pressing ▲ is invalid .
- The method of memory parameter setting and return to state of setting items, under whatever condition ,press "SET" key over 5 seconds or no operation within 30 seconds under state of customer setting .system will store current setting value and return to normal working condition.

2. Close and disconnection output relay (turn on and turn off fan)

- If practical temperature is higher than setting temperature, generator of fan would be closed. When practical temperature < (setting temperature minus return difference of temperature) generator of fan is disconnection.
- When practical temperature is higher than max temperature, alarm reiy is closed, monitor displays E2 and buzzer alarm, when practical temperature is lower than max limited temperature, alarm relay disconnected.

3. The warning function explaining

- Alarm for sensor fault: when sensor has errors (short circuit or disconnection), LED shows E1 with flash, buzzer does alarm.
- Alarm for minimum value: when measuring value is lower than 0°C,LED shows LL with flash .Buzzer does alarm.
- Alarm for max limit of temperature: when practical value is higher than max limit of temperature, LED shows E1 with flash Buzzer does alarm and alarm relay closed.
- Eliminated Alarm: Press any key to eliminate alarm sound under alarm condition. But, display and alarm state of relay will not be changed.

4. safety regulation

- Danger ■ please cut off power when wiring, no working with electricity, ■ no overloading of relay.
- Warning ■ The voltage of up power should be conformed with it marked on the machine ■ Only persons with professional qualification are able to install and adjust the machine.
- Attention ■ No use in the humidity environment. No use neither in the strong disturbance for electromagnetism environment nor strong erosion environment. ■ please keep distance between sensor cable and power cable for avoiding impossible disturbance .
- common user please don't visit administrator's menu randomly.

5. Appendix

Form 1 form of indicative light state

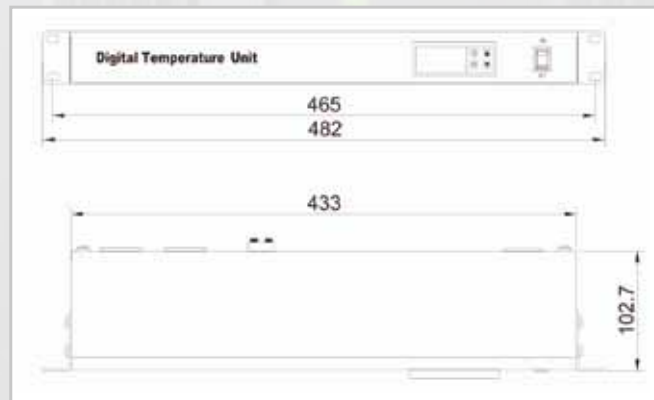
Indicator of refrigeration	On	Fan works
	Off	Fan stop working
	On	Under state of setting
	Off	Under state of normal working

Form 2 administrator menu

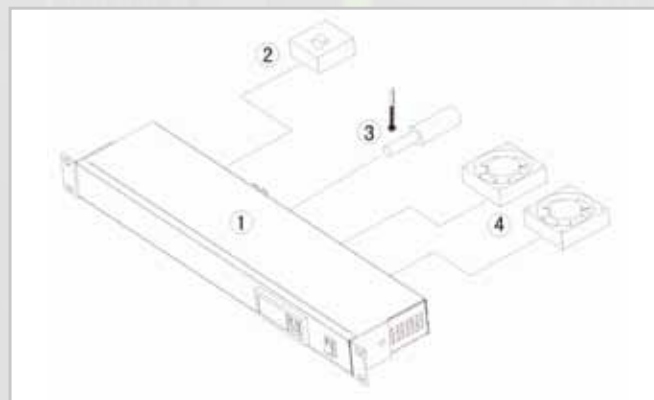
Items of menu setting	Scope of parameter setting	Original parameter setting	Display contents of menu
Return difference	0-50°C	1°C	F0
Setting of max limit temperature	0-50°C	45°C	F1

TC Digital Temperature Unit

Dimension



Instruction



Main parts:

S/N	Specification	Quantity	Unit	Material	Surface finish	Remark
1	Temperature controller	1	Piece	....	Powder coated	Cover, bottom and mounting panel
2	Cable	1	Piece	....	....	....
3	Temperature sensor	1	Piece	....	....	1.2m length
4	M6 Square nut	4	Piece	Steel	Color Zinc	Accessories
5	M6 B-head screw	4	Piece	Steel	Color Zinc	Accessories
6	Allen wrench	1	Piece	Steel	Black	Accessories
7	M4 screw	8	Piece	Steel	Black	Install temperature controller

Definition of color:

Model No.	Color
SA. ■■■■.■■■01	RAL9004
SA. ■■■■.■■■00	RAL7035

Definition of plugs in Model No:

Model No.	Plug type	Voltage/Frequency	Current
SA.4901.00 ■■	China	220V/50-60HZ	10A
SA.4902.00 ■■	UL	110V/50-60HZ	10A
SA.4903.00 ■■	Germany	220V/50-60HZ	16A
SA.4904.00 ■■	UK	230V/50-60HZ	13A

Color

RAL9004	RAL7035
Black	Grey



TC Digital Temperature Unit

- Multiple function module design which includes outlet module, control module, defending thunder module, guarding against electricity leakage module;
- Multiple function module and specification optional;
- Supplied as output module for various equipment power;
- With or without main switch for power input;
- Easy and convenient installation for 19" standard and various Non-standard installation.



6-outlet All-usage PDU, 10A input & output with surge protection & lighted master switch, 1.8m length cable, 19" positive installation (PS.0601/9300)



6-outlet All-usage PDU, 10A input & output, with lightning protection & without switch, 3.0m length cable, 19" positive installation with Smartnet logo (PS.0601/9100)



6-outlet UK-type PDU, 13A input & output with master switch, 3.0m length cable, 19" positive installation with Smartnet logo (PS.0602/9000)



6-outlet Germany-type PDU, 16A input & output, with master switch, 3.0m length cable, 19" positive installation with Smartnet logo (PS.0604/9100)



8-outlet PDU, IEC320 C14 plug 10A input, EC320 C13 outlet 10A output, with master switch, 3.0m length cable, 19" positive installation with Smartnet logo (322000742)



8-outlet All usage PDU, 2P+E industrial plug 32A input 10A all usage outlet, without switch, 3.0m length cable, 19" positive installation with Smartnet logo (322000796)



10-outlet All-usage PDU, 10A input, with lightning protection, with master switch, 3.0m length cable, reverse installation with Smartnet logo (PD.1001.9100)




10-outlet UK-type PDU, 13A input & output, with master switch, 3.0m length cable, reverse installation with Smartnet logo (PS.1002.9000)

TC Digital Temperature Unit



Specification :

Model No.	Specification	Remark
PD.0504.00 ■■	5-outlet German-type PDU	German-type with main switch, 1.8m-length, 19" installation, with 19" install panel (in color black/white)
PD.0601.00 ■■	6-outlet All-usage PDU	All-usage with main switch, 1.8m-length, 19" installation, with 19" install panel (in color black/white)
PD.0602.02 ■■	6-outlet UK-type PDU	UK-type ,1.8m-length, 19" installation, with 19" install panel (in color black/white)
PD.0603.00 ■■	6-outlet UL-type PDU	UL-type with main switch, 1.8m-length, 19" installation, with 19" install panel (in color black/white)
PD.0601.9000	6-outlet All-usage PDU	with main switch, 3.0m-length cable, 19" installation (only black)
PD.0602.9000	6-outlet UK-type PDU	with main switch, 3.0m-length cable, 19" installation (only black)
PD.0603.9000	6-outlet UL-type PDU	with main switch, 3.0m-length cable, 19" installation (only black)
PD.0604.9000	6-outlet German-type PDU	with main switch, 3.0m-length cable, 19" installation (only black)
PD.0801.9000	8-outlet All-usage PDU	with main switch, 3.0m-length cable, without mounting material (only black)
PD.0802.9000	8-outlet UK-type PDU	with main switch, 3.0m-length cable, without mounting material (only black)
PD.0803.9000	8-outlet UL-type PDU	with main switch, 3.0m-length cable, without mounting material (only black)
PD.0804.9000	8-outlet German-type PDU	with main switch, 3.0m-length cable, without mounting material (only black)
PD.1001.9000	10-outlet All-usage PDU	with main switch, 3.0m-length cable, without mounting material (only black)
PD.1002.9000	10-outlet UK-type PDU	with main switch, 3.0m-length cable, without mounting material (only black)
PD.1003.9000	10-outlet UL-type PDU	with main switch, 3.0m-length cable, without mounting material (only black)
PD.1004.9000	10-outlet German-type PDU	with main switch, 3.0m-length cable, without mounting material (only black)
PD.1201.9000	12-outlet All-usage PDU	with main switch, 3.0m-length cable, without mounting material (only black)
PD.1202.9000	12-outlet UK-type PDU	with main switch, 3.0m-length cable, without mounting material (only black)
PD.1203.9000	12-outlet UL-type PDU	with main switch, 3.0m-length cable, without mounting material (only black)
PD.1204.9000	12-outlet German-type PDU	with main switch, 3.0m-length cable, without mounting material (only black)
PD.1501.9000	15-outlet All-usage PDU	with main switch, 3.0m-length cable, without mounting material (only black)
PD.1502.9000	15-outlet UK-type PDU	with main switch, 3.0m-length cable, without mounting material (only black)
PD.1503.9000	15-outlet UL-type PDU	with main switch, 3.0m-length cable, without mounting material (only black)
PD.1504.9000	15-outlet German-type PDU	with main switch, 3.0m-length cable, without mounting material (only black)



Defintion of color:

Specification	Reference	V/HZ	A	Standard
All-usage		250V/50-60HZ	10A	GB2093.3-1997 (China)
German-type		250V/50-60HZ	16A	DIN49440 (Germany)
UL-type		120V/50-60HZ	10A	IEC60906 (UL)
UK-type		250V/50-60HZ	13A	BS1363 (UK)

Definition of body color:

 00	 01
grey	black
RAL7035	RAL9004

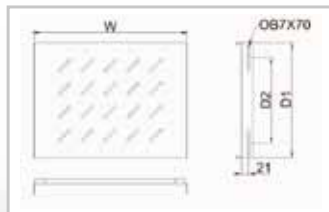
Color:

RAL9004	RAL7035
Black	Grey
	

Accessories



Fixed Shelf



Dimension

- Used for placing equipment

Material :

- Spcc cold rolled steel t1.2

Surface finish :

- Degreasing, phosphoric powder coated.

Loading capacity :

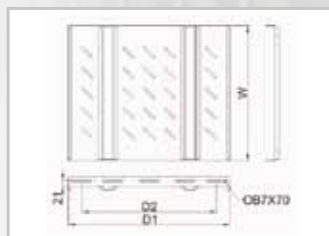
- 60 KG.

Color :

- RAL9004 ■ RAL7035



Heavy-duty fixed shelf



Dimension

- For applications when heavy loads up to 100kg.

Material :

- Spcc cold rolled steel t1.2

Surface finish :

- Degreasing, phosphoric powder coated.

Loading capacity :

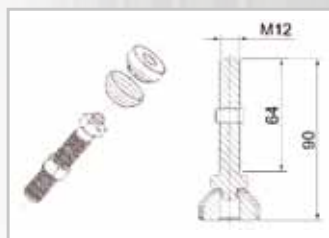
- 100 KG.

Color :

- RAL9004 ■ RAL7035



Adjustable Feet



Dimension

- Support and make cabinet stable.

Material :

- Steel

Surface finish :

- Carbonic black.

Loading capacity (KG):

- 600



Fixed shelf with mounting ear



Dimension

- Used for placing equipment.

Material :

- Spcc cold rolled steel t1.2

Surface finish :

- Degreasing, phosphoric powder coated.

Loading capacity :

- 60 KG.

Color :

- RAL9004 ■ RAL7035



Heavy-duty fixed shelf with mounting ear



Dimension

- For applications when heavy loads up to 100kg.

Material :

- Spcc cold rolled steel t1.2

Surface finish :

- Degreasing, phosphoric powder coated.

Loading capacity :

- 100 KG.

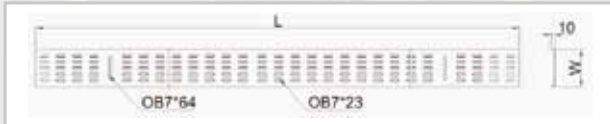
Color :

- RAL9004 ■ RAL7035

Accessories



Cable tray



Dimension

Material :

- Spcc cold rolled steel t1.2

Surface finish :

- Degreasing, phosphoric powder coated.

Color :

- RAL9004 ■ RAL7035

- For applications when heavy loads up to 100kg.

Material :

- Spcc cold rolled steel t1.2

Surface finish :

- Degreasing, phosphoric powder coated.

Loading capacity :

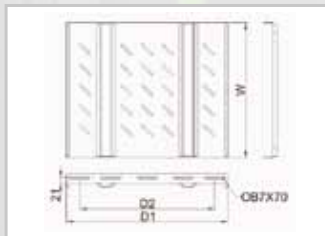
- 100 KG.

Color :

- RAL9004 ■ RAL7035



Heavy-duty fixed shelf



Dimension

Material :

- Spcc cold rolled steel t1.2/14"2-section slide.

Surface finish :

- Degreasing, phosphoric powder coated.

Loading capacity :

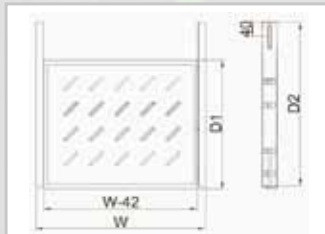
- 20 KG.

Parameter :

- Flexing length: 210MM



Sliding Shelf



Dimension

Material :

- Spcc cold rolled steel t1.2/14"2-section slide.

Surface finish :

- Degreasing, phosphoric powder coated.

Loading capacity :

- 20 KG.

Parameter :

- Flexing length: 210MM



Adjustable Keyboard panel



Dimension

Material :

- Spcc cold rolled steel t1.2/14"2-section slide.

Surface finish :

- Degreasing, phosphoric powder coated.

Loading capacity :

- 20 KG.

Parameter :

- Flexing length: 210MM



Adjustable Keyboard panel
with small round lock

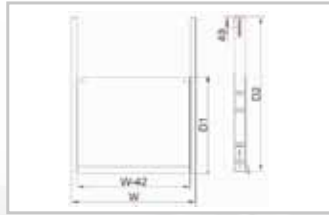


Dimension

Accessories



Fixed Shelf



Dimension

Material :

- Spcc cold rolled steel t1,2/14"2-section slide.

Surface finish :

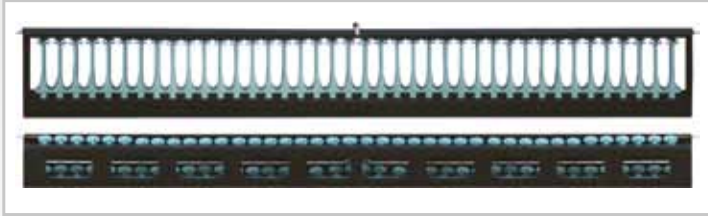
- Degreasing,phosphoric powder coated.

Loading capacity :

- 20 KG.

Parameter :

- Flexing length: 210MM



Fish Skeleton cable management Slot (for K series cabinet)

Material :

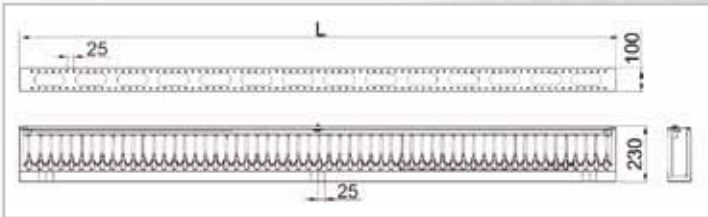
- Spcc cold rolled steel t1.2 & 1.5.

Surface finish :

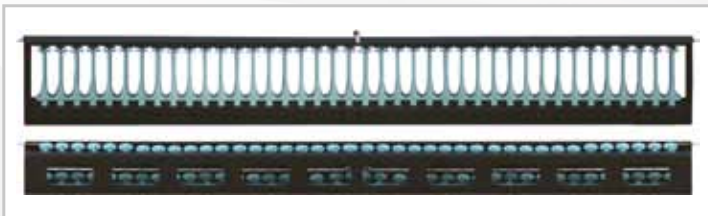
- Degreasing,phosphoric powder coated.

Color :

- RAL9004 ■ RAL7035



Dimension



Fish Skeleton cable management Slot (for A series cabinet)

Material :

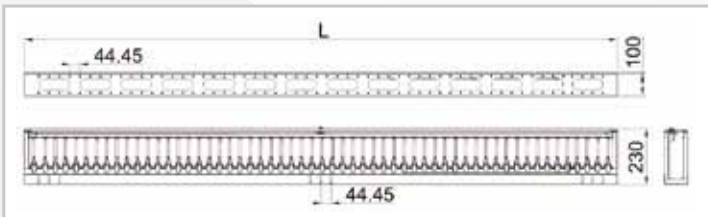
- Spcc cold rolled steel t1.2 & 1.5.

Surface finish :

- Degreasing,phosphoric powder coated.

Color :

- RAL9004 ■ RAL7035



Dimension

Accessories



Cable Management Slot



Dimension

Material :

- Spcc cold rolled steel t0.8

Surface finish :

- Degreasing,phosphoric powder coated.

Color :

- RAL9004 ■ RAL7035



A1/A2/A3/A4/AS/AD Plinth



Dimension

Material :

- Spcc cold rolled steel , Thickness : Plate 1.2MM others 2.0MM

Surface finish :

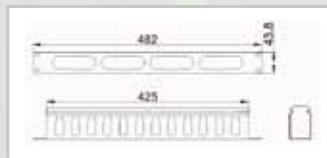
- Degreasing,phosphoric powder coated.

Color :

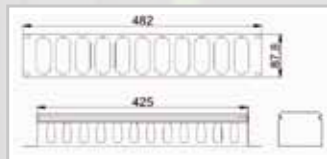
- RAL9004 ■ RAL7035



1U, 2U Metal Cable Management with Cap



1U Metal Cable Management with Cap



2U Metal Cable Management with Cap

Material :

- Spcc cold rolled steel t1.2.

Surface finish :

- Degreasing,phosphoric powder coated.

Color :

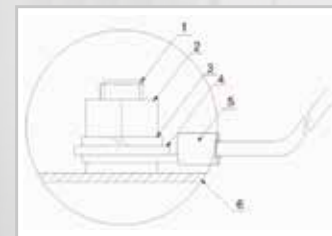
- RAL9004 ■ RAL7035



1U, 2U Plastic Cable Management with Cap



Photo of Earthing Kit



Drawing of Earthing Kit

- Color : ■ Black

Accessories



Baying kits (for CC/KB cabinet)

Connector :

- Connecting CC/KB cabinet with nuts

Material :

- Steel

Surface finish :

- Plated Blue Zinc.

Remark: move side doors when connect.



Baying kits (A1/A2/A3/A4/AS/AD)

Connector :

- Connecting A1/A2/A3/A4/AS/AD cabinet without nuts

Material :

- SPCC cold rolled Steel t2.0

Surface finish :

- Plated Blue Zinc.

Remark: move side doors when connect.



Heavy-duty fixed shelf with mounting ear

Surface finish :

- Orchid Zinc.



3" Heavy duty Castor with brake

Surface finish :

- Orchid Zinc.



Castors

Surface finish :

- Orchid Zinc.



Keyboard with mouse panel

- 19" cabinet, keyboard with mouse, easy to operate

Material :

- Spcc cold rolled steel t1.2/12" 3pcs sliding rails.

Surface finish :

- Degreasing, phosphoric powder coated.

Parameter :

- Flexing length: 220MM

Loading capacity :

- 20KG



Cooling fan

- Lower-noise, long lifespan, plastic filter optional.

Dimension:

- 120mm X 120mm X 38mm

Mounting Dimension:

- 105mm X 105mm

Air flowing :

- 50-110CBM/H

Accessories



Small round lock
Simple structure, economic operate easily .

Surface finish :
■ Plated Nickel



Advanced moon-shaped lock
Surface in silver gray, spinning structure, special surface with coating.

Surface finish :
■ Oxidation powdered.



Spring lock
Spring lock with spinning structure, handle be automatically open front, surface with special coating.

Surface finish :
■ Black Oxidation powdered.



1U Metal cable management

■ 19" cabinet, removable metal cable management ring.

Material :

■ Spcc t1.5/metal cable management ring.

Surface finish :

■ Degreasing,phosphoric powder coated.

Color :

■ RAL9004 RAL7035



1U Plastic cable management

■ 19" cabinet, removable plastic cable management ring.

Material :

■ Spcc t1.5/plastic cable management ring.

Surface finish :

■ Degreasing,phosphoric powder coated.

Color :

■ RAL9004 RAL7035



Blanking panel

■ 19" cabinet as blanking plate.

Material :

■ Spcc cold rolled steel t1.5

Surface finish :

■ Degreasing,phosphoric powder coated.

Color :

■ RAL9004 RAL7035



Display panel

■ 19" cabinet, removable metal cable management ring.

Material :

■ Spcc cold rolled steel t1.2

Surface finish :

■ Degreasing,phosphoric powder coated.

Color :

■ RAL9004 RAL7035



Shunting rail

■ Use for 19" cabinets fastening cables

Material :

■ Spcc cold rolled steel t1.5

Surface finish :

■ Degreasing,phosphoric powder coated.

Color :

■ RAL9004 RAL7035



L rail

■ Fastened to mounting rails for supporting equipment.

Material :

■ Spcc cold rolled steel t1.5

Surface finish :

■ Degreasing,phosphoric powder coated.

Color :

■ RAL9004 RAL7035

Accessories



Plastic cable management slot

- Use for cables in cabinets

Color :

- Grey



Plastic cable management ring

- For cables in network cabinets

Material :

- Plastic

Height :

- 2U



Plastic cable management fish Skeleton

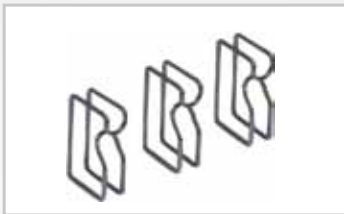
- For cables in network cabinets

Material :

- Plastic

Height :

- 6U



Metal cable management ring

- For cables in network cabinets.

Material :

- Spcc cold rolled steel

Surface finish :

- Grey

Color :

- RAL9004 RAL7035 , Plated Nickel



Screws and nuts with cushion

Specification :

- Screw: M6*12 ; Nut: M6 washer: $\phi 6$

Surface finish :

- Plated Nickel



Advanced Screws and nuts

Specification :

- Screw: M6*12 ; Nut: M6

Surface finish :

- Plated Nickel



Inner 6-angle screws & nuts

Specification :

- Screw: M6*12 ; Nut: M6

Surface finish :

- Plated color Zinc



1U fan unit

- For network cabinet , adjust inner temperature .

Parameter :

- Period: 0~50°C input: 220VAC/115VAC

Material :

- Spcc cold rolled steel t1.2

Surface finish :

- Degreasing,phosphoric powder coated.

Color :

- RAL9004 ■ RAL7035



1U fan unit with thermostat

- For network cabinet , adjust inner temperature .

Parameter :

- Period: 0~50°C input: 220VAC/115VAC

Material :

- Spcc cold rolled steel t1.2

Surface finish :

- Degreasing,phosphoric powder coated.

Color :

- RAL9004 ■ RAL7035

Accessories



L-Shaped mounting profile (for A series cabinets)



Dimension

Material :

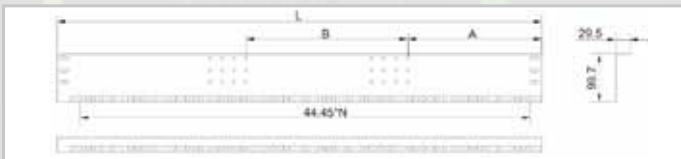
- Spcc Cold rolled steel t2.0

Surface finish :

- Blue Zinc



L-Shaped mounting profile (for 600-width K series cabinets)



Dimension

Material :

- Spcc Cold rolled steel t2.0

Surface finish :

- Blue Zinc



L-Shaped mounting profile (for 800-width K series cabinets)



Dimension

Material :

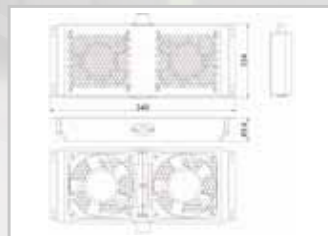
- Spcc Cold rolled steel t2.0

Surface finish :

- Blue Zinc



Fan Unit



Dimension

Material :

- Spcc cold rolled steel t1.2

Surface finish :

- Degreasing,phosphoric powder coated.

Thickness :

- Powder cord box:0.8 mm;

Color :

- RAL9004 RAL7035

Accessories



Cantilever shelf - I



Dimension

Material :

- Spcc cold rolled steel

Surface finish :

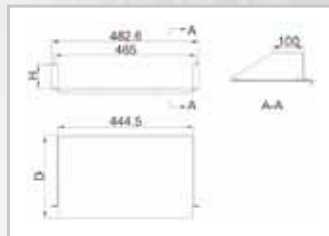
- Degreasing,phosphoric powder coated.

Color :

- RAL9004 ■ RAL7035



Cantilever shelf - II



Dimension

Material :

- Spcc cold rolled steel

Surface finish :

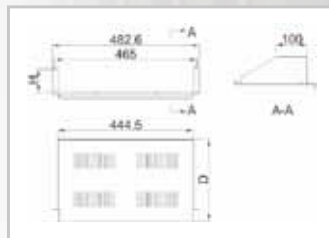
- Degreasing,phosphoric powder coated.

Color :

- RAL9004 ■ RAL7035



Cantilever shelf - III



Dimension

Material :

- Spcc cold rolled steel

Surface finish :

- Degreasing,phosphoric powder coated.

Color :

- RAL9004 ■ RAL7035



1U height cantilever shelf with mounting ear



Dimension

Material :

- Spcc cold rolled steel

Surface finish :

- Degreasing,phosphoric powder coated.

Color :

- RAL9004 ■ RAL7035



2U height cantilever shelf with mounting ear



Dimension

Material :

- Spcc cold rolled steel

Surface finish :

- Degreasing,phosphoric powder coated.

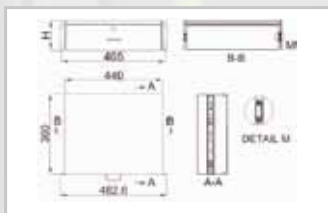
Color :

- RAL9004 ■ RAL7035

Accessories



Drawer



Dimension

Material :

- Spcc cold rolled steel/ 14*2 Section slide

Surface finish :

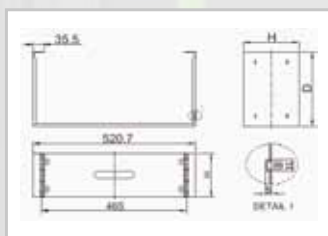
- Degreasing, phosphoric powder coated.

Color :

- RAL9004 ■ RAL7035



Wall mount bracket



Dimension

Material :

- Spcc cold rolled steel

Thickness: 1.5mm

Surface finish :

- Degreasing, phosphoric powder coated.

Color :

- RAL9004 ■ RAL7035



1U Brush type cable management

Material :

- Spcc cold rolled steel

Thickness: 1.2mm

Surface finish :

- Degreasing, phosphoric powder coated.

Color :

- RAL9004 ■ RAL7035



Cable entry with brush

Material :

- Spcc cold rolled steel

Thickness: 1.2mm

Surface finish :

- Degreasing, phosphoric powder coated.

Color :

- RAL9004 ■ RAL7035

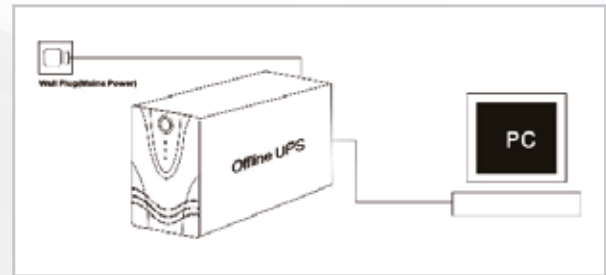


Energy saving tube

- With CE & CCC certification

UPS

offline AVR UPS future star series 400-1500va (1ph in/1ph out)



Application

- Smartnet Future Star Offline AVR UPS mainly used for computer, POS, Computer Peripherals.

Key Features

- LED/LCD display optional, smart design.
- Equipped with boost and buck AVR to stabilize input voltage.
- Wide input voltage range, AVR function
- Intelligent battery management
- Overload/overcharge/short-circuit protection
- Low battery alarm
- Anti restart while AC recover
- Built in DC start function enables UPS to be started up without AC power supply.
- Smart RS-232 or USB communication port with free download software from internet
- Modem/line surge protection: RJ11/RJ12/RJ45



- 1 Output socket (can be chosen)
- 2 TEL/Modem/Fax surge protection (optional)
- 3 USB (optional)
- 4 AC input
- 5 Fuse
- 6 Rs232 (optional)

Model		F400	F500	F650	F800	F1000	F1200	F1500
Nominal Capacity		400VA/ 240W	500VA/ 300W	650VA/ 390W	800VA/ 480W	1000VA/ 600W	1200VA/ 720W	1500VA/ 900W
Input	Voltage Range	145~280VAC/ 80VAC-150VAC						
	Frequency	50/60Hz						
Output	Voltage Range	220VAC/120VAC±10%						
	Frequency	50Hz/60Hz±5%						
Output Waveform		Square Wave						
Transfer Time		<8ms						
Battery	Type	Sealed free maintenance lead acid battery						
	Capacity	12V 4AH *1PCS	12V 7AH *1PCS	12V 7AH *1PCS	12V 9AH *1PCS	12V 7AH *2PCS	12V 9AH *2PCS	12V 9AH *2PCS
	Recharge Time	8 hrs to 90% of capacity full load discharge						
	Protection	Auto protect						
	Back-up time (at a PC load with 15" monitor)	10 minutes	18 minutes	18 minutes	22 minutes	30 minutes	35 minutes	35 minutes
DB-9 port, communication software		Optional RS232, RJ11, RJ45, USB						
Protection	AC mode	Fuse						
	Short circuit	AC	Fuse					
		Mode	Auto protect					
Alarm	Alarm	Battery discharge	Alarm beeps every 4 seconds					
		Low battery voltage	Alarm beeps every second					
		Overload	Alarm beeps continuously					
	Indicator light	Auto adjust	Green lighting: AC mode					
		Battery discharge	Red lighting: Battery mode					
Environment	Operating temperature	0°C~40°C						
	Operating humidity	0-90% non-condensing						
	Noise	<35db (1 meter distance)						
UPS dimension (LxWxH) mm		275*90* 138	33*103*152			345*122*190		
Net weight (N.W)		4.5 KG	6.5 KG	6.8 KG	7.5 KG	11 KG	12 KG	13 KG
Gross weight (G.W)		4.7 KG	6.7 KG	7 KG	7.7 KG	11.3 KG	12.3 KG	13.3 KG

*Specification is subject to change without prior notice.

Low Frequency Online UPS High Efficiency Star Series HE11 6-20KVA(1Ph in/1Ph out); HE31 10-40KVA(3Ph in/1Ph out)

Key Features

- LED/LCD display optional, smart design.
- Equipped with boost and buck AVR to stabilize input voltage.
- Wide input voltage range, AVR function
- Intelligent battery management
- Overload/overcharge/short-circuit protection
- Low battery alarm
- Anti restart while AC recover
- Built in DC start function enables UPS to be started up without AC power supply.
- Smart RS-232 or USB communication port with free download software from internet
- Modem/line surge protection: RJ11/RJ12/RJ45



HE11 6-15KVA					HE31 10-40KVA					
Model	6KVA	8KVA	10KVA	15KVA	10KVA	15KVA	20KVA	30KVA	40KVA	
Capacity	4.8KW	6.4KW	8KW	12KW	8KW	12KW	16KW	24KW	32KW	
Rated Voltage	220V single phase				380V three phase 4 wires+G					
Rated frequency	50/60HZ									
AC input										
Voltage range	220V±25% single phase				380V±25% three phase 4 wires+G					
Frequency range	50/60HZ±5%									
Soft strat	0-100% 5sec									
Power factor	>0.92 (with input filter)									
Bypass input										
Voltage range	220V±25% single phase				380V±25% three phase 4 wires+G					
Frequency range	50/60HZ±5%									
Inverter bypass	(Overload) 0ms									
Output										
Voltage accuracy	220V±1% (steady-state load), 220V±3% (load fluctuations)									
Frequency accuracy	50/60HZ±0.05Hz (battery power)									
Power factor	0.8 (lagging)									
Distortion	<3% linear load), <5% (non linear load)									
Steady-state response time	<10 ms									
Overload capacity	110% load can run normally 125%10min 150%1min									
Battery										
Nominal Voltage	192V				360V					
Float Voltage	216V				405V					
Cut-off Voltage	168V				315V					
Charge current	1A-50A (according to the battery capacity can be set configuration)									
Other										
Display	LED/LCD									
Alarm	Sound and light alarm									
Protection	UPS over current, short circuit, under voltage, over temperature									
Environment										
Noise	60-65 dB									
Operating	Temperature 0-40°C Relative humidity 0-90%									
Box operational	Gray (optional)									
Physical										
Weight (KG)	Net	122	125	143	175	182.5	235.5	285.5	354.8	354.8
	Gross	142	147	163	199	225.5	325.2	325.2	389.5	389.5
Dimensions WxDxH (mm)	201x600x560		305x586x850			350x675x920				

*Specification is subject to change without prior notice.

High Frequency Online UPS 0.8 Power Factor Princess Star Series 1K-6Kva (1ph in/1ph out)

Introduction

- Princess Star Series Online UPS 1K-6Kva, is of fully of advanced DSP online HF UPS. It has high adaptability, performance, compact design & less batteries to reduce your space & installation cost.



Application

- Network, data centre, servers & workstations, control system, communication system & office etc.

Key Features

- Digital LCD display for UPS operation
- High frequency & double conversion
- Fully digitized control
- Output power factor : 0.8
- Wide input range
- DC voltage flexible
- Environment protection
- Smart RS232(SNMP card optional)
- Cold start
- Compact design
- Lightening & surge protection 1050J

Standard Model	P1K	P2K	P3K	P5K	P6K	
Long Run Model	P1K	P2KL	P3KL	P5KL	P6KL	
Capacity	1Kva/0.8Kw	2Kva/1.6Kw	3Kva/2.4Kw	5Kva/4.0Kw	6Kva/4.2Kw	
Phase	Single, 2 Wire+ Ground					
Ac input	PF	Above 0.98				
	THDI	<5%				
	Voltage Range	110-285Vac(50%LOAD), 160-285Vac(FULL LOAD) or 80-150Vac (1-3KVA)				
	Frequency Range	50/60Hz±5Hz				
	By-pass	110VAC-285VAC or 80-150VAC(1-3KVA)				
Frequency following	50/60Hz±5Hz					
Battery	DC voltage	24/36Vdc	48/72/96Vdc	72/96Vdc	120Vdc	120Vdc
	Standard Model Qty	2/3pcs* 12V7.2Ah	4/6/8pcs* 12V7.2Ah	6/8pcs* 12V7.2Ah	10pcs* 12V 9Ah	10pcs* 12V 9Ah
	Long run Model Qty	Depends on requested back-up time				
	Recharge Voltage	27/41VDC	55/82/110VDC	82/110VDC	137Vdc	
	Type	Free maintenance Lead-Acid battery				
	Recharging current	8A/1A			64A/1A	
Output	PF	0.8			0.7/0.8	
	Voltage	220/230/240 Vac ±1% or 110/120/127 Vac±1% (1-3Kva)				
	Frequency	50/60Hz(Auto Sense)				
	crest factor	3:1				
	Wave distortion	Linear load <3%, Nonlinear load <5%				
Over load Ability	30s when overload is 108%~150% 200ms when overloaded above 150%					
Transfer time	0ms					
Ac abnormal	Alarm every 4 seconds					
Battery low voltage	Keep alarm every 1 second					
Over load	Keep alarm every 0.5 second					
Display	High definition LED & LCD, Clear & friendly display interface					
Efficiency	Above 87%					
Protections	Output: Short circuit, overload, low voltage Input: Instant high voltage protection Others: Over-temperature protection, battery low, charger PCB					
Communication	RS232 (standard), RS485 & SNMP card (optional)					
Working Temp.	0~40°C					
Relative humidity	0~90% (No coagulation)					
Cooling	Intelligent speed-control fan					
Input & output	Socket (optional)			Terminals		
Surge protection	IEC60664-1 Graded protection					

EMI	EN 55022 Grade A				
ESD	IEC 1000-4-2:Grade 3				
EFT	IEC 1000-4-4:Grade 3				
RS	IEC 1000-4-3:Grade 3				
SURGE	IEC 1000-4-5:Grade 3				
Gross weight (KGS)	8.0(L)	18(L)	18(L)	20(L)	20(L)
	12/14(S)	27/31(S)	31/35(S)	45(S)	45(S)
Unit dimension(mm)	420*144*215	475*191*340		475*213*340(L)	
				510*213*427(S)	
Packing dimension (L*W*H) MM	524*258*334	603*332*482		603*332*482(L)	
				650*363*572(S)	
Quantity / 20ft	550pcs	260pcs		200pcs/150pcs	

*Specification is subject to change without prior notice.

Outdoor Online UPS Top Star Series 1K-10Kva (1ph in/1ph out)

Key Features

- Smartnet outdoor intelligent high frequency online UPS provide continuous pure sine wave AC power supply for outside communications / network equipment.
- Double-conversion online design, high temperature resistant, anti-cold, sealing level for IP55; with the wide range of input voltage & frequency of input window (-45% +35% rated voltage and ±10% rated frequency), in many remote areas of china after a severe test of the grid.

Application

- Smartnet outdoor UPS is mainly used in the corner of the city, remote roads, mountains, bad environment, such as high temperature (+50°C) / low temperature (-15°C), server dust, moisture, rain, mist erosion, very poor power quality (voltage long-term higher than 260V or less than 160V, frequency abnormal change in the area).



Model		T1K	T2K	T3K	T6K	T10K	
Capacity	Capacity	1KVA/700W	2KVA/1400W	3KVA/2100W	6KVA/4200W	1000KVA/7000W	
Input	Nominal voltage	220/230/240VAC					
	Nominal Frequency	50/60Hz					
	Voltage range	115~295VAC(±3VAC)			176~297VAC(±3VAC)		
	Frequency range	50Hz(46~54Hz), 60H(56Hz~64Hz)					
Output	Power factor	0.98					
	Voltage precision	220/230/240 x (1±2%) VAC					
	Frequency precision	50/60Hz±0.05Hz					
	Power factor	0.7					
	THDI	<3% (linear load)		<6% (non-linear load)			
	Power factor	0.7					
	Overload capability	Overload (110%~150%) for 30 seconds, then automatically transfer to bypass. When load is normal, it can automatically transfer to normal mode.					
	Crest factor	3:1					
Transfer time	0ms(AC to DC)						

Battery	DC Voltage	36VDC	96VDC	96VDC	240VDC	240VDC
	Charge current	4A/8A (optional)			4.2A	4.2A
	Internal battery capacity	(38/65/80/100AH/120AH) optional				
Panel display	LED/LCD digital display	Display input & output voltage, frequency, battery voltage, battery capacity, load percentage				
Communications	Communicate interface	RS232, SNMP card (optional)				
Environment	Temperature	0~40°C				
	Humidity	0~95% Non-condensing				
	Storage temp.	-25°C~55°C				
	Altitude	<1500m				
	Acoustic noise with in 1 meter	<50dB				
Physical	Weight (KG)	85	125	125	150	155
	Dimensions (LxWxH)mm	900*640*900	900*640*1185	900*640*1185	940*940*1770	940*940*1770

*Specification is subject to change without prior notice.

High Frequency Outdoor Online UPS Rack Mount Star Series RM 1K-10KVA (1ph in/1ph out)

Key Features

- True online double conversion technology with advanced microprocessor control.
- PWM technology with IGBT.
- LED/LCD indicators display detailed real-time UPS status & parameters.
- Set output voltage, frequency parameter & bypass function on the display.
- Advanced MCU microprocessor control technology, ensure long life reliability.
- Wide input voltage range, zero transfer time.
- Rack mount 19" design to save space.
- Excellent protection against overvoltage, over load, over current, over charge & so on.
- Input L & N lines reverse wiring detection, auto start when AC back.
- DC start function, input PFC revise function.
- Humanization bypass output, can be adjustable.
- Smart RS232 communication with monitoring software.
- Intelligent slot available for AS-400 dry contact & SNMP card remote control.
- Strong antijamming capability.
- Available to work with generators.
- Lightning, surge, short circuit, network/fax/modem surge protection.



Application

- RM series 1KVA~10KVA high frequency rack mount online UPS is specially designed for servers, data-center critical network devices, sensitive electronic equipment, telecom, bank, hospital, bureau, traffic, public security, ATM and so on.

Model		RM1K	RM2K	RM3K	RM1KL	RM2KL	RM3KL	RM6KL	RM10KL		
Rated power	VA/W	1Kva/0.7Kw	2Kva/1.4Kw	3Kva/2.1Kw	1Kva/0.7Kw	2Kva/1.4Kw	3Kva/2.1Kw	6Kva/4.2Kw	10Kva/7Kw		
Input	Phase	Single phase with ground									
	nominal voltage	110/115/120Vac or 220/230/240Vac						220/230/240Vac			
	Voltage range	60-138Vac or 115~300Vac						176~276VAC			
	Frequency range	46~54Hz(default), user adjustable within 40~60Hz						46~54Hz			
	Power factor	0.97						0.98			
	Connection	IEC320-10A inlet		IEC320-16A inlet	IEC320-10A inlet		IEC320-16A inlet	Terminal block			
Output	Phase	Single phase									
	Voltage	110/115/120Vac or 220/230/240Vac±2%						110/115/120Vac or 220/230/240Vac±1%			
	Frequency	46~54Hz or 50Hz±0.2Hz (line mode)						46~54Hz(line mode)			
		50Hz±0.2Hz (battery mode)						50Hz±0.05Hz (battery mode)			
	Waveform	Pure sine wave									
	Over load Capability	108%~150% for 30 sec, 150% for 300 ms						105%~130% for 10min., 130% for 1 min.			
	Current crest ratio	3:1									
Connections	IEC320-10A*4		IEC320-10A& Terminal block	IEC320-10A *4		IEC320-10A& Terminal block	IEC320-10A*4 & Terminal block				
Bypass	Automatic transfer	On overload & UPS failure									
	Before UPS power-on	Default 'No', user adjustable to 'yes'						yes			
	Voltage range	80~264Vac (default), user adjustable within 80-286Vac						176~261Vac			
Transfer time	0ms; less than 4 ms from inverter to bypass & viceversa						Zero				
LED/LCD indicators	Load level/battery level, battery, utility power, inverter, bypass, overload, fault										
Audible alarm	Bypass, on battery mode, battery low, overload, fault										
Communications	RS-232 Serial interface										
	Intelligent slot;										
	Options:WEBPOWER SNMP/WEB card, AS400 card or WinPower CMC										
Audible alarm	Bypass, on battery mode, battery low, overload, fault										
Network surge protection	RJ45 I/O port available for network or fax/modem										
Environmental	Operating temperature	0~40°C									
	Operating humidity	20~90% non-condensing									
Main Unit	Net weight(kg)	16.3	10.3	11.2	9.1	11.5	12.3	18.3	20.3		
	Dimensions (WxDxH) mm	482*420*88 (2U)		482*420*88 (2U) or (3U internal batteries)		482*420*88 (2U)		482.6*600*130 (3U)			
Battery pack	Type	Internal batteries	External battery pack								
	Nominal DC voltage	36VDC		96VDC		36VDC	96VDC		240VDC		
	Battery numbers & capacity	5 min	9 min (with 1BP)	5 min (with 1BP)	Depending on the capacity of external battery packs						
	Recharge time	5hrs to 90%	5hrs to 90%	5hrs to 90%							
	Charging current (max)	1.0A	1.0A	1.0A	8A±1A			4.2A			
	Charging voltage	41.1Vdc±0.6V		110Vdc±0.4V		41.1Vdc±0.6V	110Vdc±0.4V		274Vdc±1%		
	Net weight(Kg)	25.3	25.3		
Dimensions (WxDxH) mm	....	482*420*88 (2U)	482*420*88 (2U)	....	....	....	....	....

*Specification is subject to change without prior notice.

High Frequency Online UPS Super & Green Star Series 1K-3KVA (1ph in/1ph out)

Application

- Smartnet super & green star series UPS 1-3Kva is specially designed for servers, data-center critical network devices, sensitive electronic equipment, telecom, bank, hospital, bureau, traffic, public security, ATM & so on.

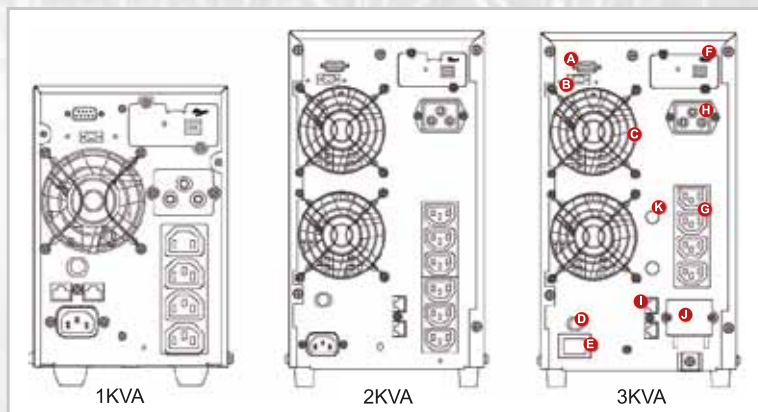


LCD Model



LED Model

Back Panel Description

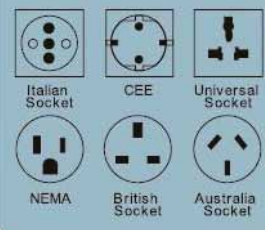


- A Communication port
- B EPO
- C Cooling fan
- D Breaker
- E Input plug
- F intelligent port/USB port (optional)
- G Output socket
- H External battery socket (for long backup time UPS only)
- I Network/Fax/Modem surge protection
- J Output terminal
- K Fuse

Key Features

- Pure sine wave, double conversion online.
- Wide input voltage range, zero transfer time.
- Advanced MCU microprocessor control technology.
- Comprehensive electrical isolation & bypass protection so on.
- Large blue LCD digital display for LCD model, LED indicators display for LED model.
- DC start when power off, convenient & reliable, over charge & so on.
- Input PF correction, reduce the harm of harmonic wave to the power grid, convenient to connect mini type generator.
- Voltage regulator circuit.
- Input N/L inspection function & date line protection.
- Humanization bypass output, can be adjustable.
- Smart RS232 communication with monitoring software.

Available sockets



Super star series	LED model	S1K	S2K	S3K	S1KL	S2KL	S3KL
Green star series	LCD model	G1K	G2K	G3K	G1KL	G2KL	G3KL
Capacity	VA/W	1000VA/700W	2000VA/1400W	3000VA/2100W	1000VA/700W	2000VA/1400W	3000VA/2100W
Capacity	Voltage range	60~138VAC or 115~300VAC					
	Frequency range	50Hz: 46~54Hz; 60Hz: 56~64Hz					
	Phase	Single phase with ground					
	Power factor	≥0.97					
Capacity	Voltage	110/115/120 or 220/230/240 *(1±2%)VAC					
	Frequency	50/60Hz (adjustable) 50/60Hz AC mode: follow AC mode (AC range 50Hz: 46~54Hz, 60Hz: 56~64Hz); battery mode: 50/60Hz(1±0.2%)					
	Wave form	Pure sine wave					
	Power factor	0.7 (optional 0.8)					
	Harmonic distortion	<3% THD (linear load), <5% THD (non-linear load)					
	Overload capacity	110%~150% maintain 30s then turn to bypass output, over 150% maintain 200ms					
	Current crest ratio	3:1					
	Connections	IEC320*4	IEC320*6	IEC320*3 & Terminal block	IEC320*4	IEC320*6	IEC320*3 & Terminal block
Efficiency	To AC mode	85%					
	To battery mode	83%					
Battery	Type	Sealed lead acid maintenance free battery					
	Nominal DC voltage	36VDC	96VDC		36VDC	96VDC	
	Quantity	3pcs*12V7.2Ah	8pcs*12V7.2Ah		Depends on requested backup time		
	Back-up time (full load)	≥7 minutes	≥8 minutes	≥6 minutes	Depends on the capacity of external battery bank		
	Recharge time	5hours to 90% of capacity full discharge					
	Charge current (Max)	1.0A			7A	8A	
	Charge voltage	41.1Vdc ± 0.6V	110Vdc ± 0.4V		41.1Vdc ± 0.6V	110Vdc ± 0.4V	
Bypass	Automatic transfer	On overload & UPS failure					
	Before UPS power-on	Default 'ON' user adjustable to 'YES'					
Transfer time	0ms, less than 4ms from inverter to bypass & viceversa						
Indicators	LED display	UPS status, battery capacity, loading, fault code					
	LCD display	I/P & O/P voltage & frequency, battery voltage					
Audible alarm	0ms, less than 4ms from inverter to bypass & viceversa						
Audible noise	At 1 meter distance	<45dB	<50dB		<45dB	<50dB	
	Intelligent RS232 serial port	Software support windows family software, linux, sun network operating system, IBM Aix compaq truw64, SGI IRIX, freeBSD, HO-UX & MAC					
Communications	SNMP (optional)	Remote control UPS through SNMP management & internet					
	USB (optional)	Windows family software & MAC OS					
Network surge Protection	RJ45 I/O port available for network or fax/telephone line/modem						
Environmental	operating temperature	0~40°C					
	operating humidity	20~90% (non condensing)					
Weight	Net weight (Kg)	14	31.5	32	7	13.5	14
Dimension	L*W*H (mm)	400*145*220	460*192*348		400*145*220	460*192*348	

*Specification is subject to change without prior notice.

High Frequency Online UPS Tomorrow Star Series TS6-10KVA (1ph in/1ph out); 31TS10-40KVA (3ph in/1ph out)

Key Features

Tailored for grid environment

- Output power factor up to 0.8-applicable to the tendency of future load evaluation, & deliver higher payload capability. Total power factor up to 90% can minimize the power loss of UPS & utilization cost for user. Active power factor correction (PFC) technology allow the input power factor approaching to 1, dramatically reducing the immunity on utility grid. Wider range of input voltage tailored for grid can be suitable to all server environments. Excellent input frequency range makes UPS suitable to different power supply devices, ie. generator set.



Flexible configuration on demand

- High scalability: fully meet the customers demands. Online intervention: safe & online intervention without any power supply interruption to load. Emergency power off (EPO): UPS can be instantly shut off in case of any emergency. Parallel kit: realize the parallel extension & redundancy function, offer more flexibility & safety for user's power supply planning. Dust-proof kit: Increases the dust-proof level in industrial environment. Isolating transformer: offer isolation protection for the user.

High reliability

- Its cut-edge digital control technology of DSP (digital signal processor) can deliver higher quality, performance & reliability. Higher payload & overload capability, better load compatibility, & suitable for various load type. Powerful interference immunity capability in compliance with EMC requirements of IEC61000-4, deliver your device a clean electric environment.

Intelligent battery management

- With its advanced intelligent charge control mode, UPS can automatically select the optimal charge mode as per the battery type & conditions, thus further maximizing the lifespan of battery bank. In addition, the system can periodically conduct the charge & discharge management for the battery bank. User can also select the battery voltage (192V or 240V) on demands. The user can query and set the proper UPS control parameter for intelligent UPS management. It may automatically identify and adapt to 50/60Hz pwer supply system, fulfilling the requirements in various power supply systems. Perfect failure protection & alarm function: provide complete failure protection & clear alarm notification function incase of I/O over-voltage or under voltage, battery over-charge or under-voltage, overload & shortcircuit.

Rich communication & monitoring features

- Provide RS232 interface & communication cable for local or remote power suppply management. Provide intelligent slot available to web power (SNMP), CMC, or AS400 card (dry contact) for remote management & monitoring function.

Compact design, lower noise

- With leading control technology & craftsmanship, this UPS can greatly increase the power density & reduce the footprint, therefore save more expensive space in your office environment. Additionally, its lower noise dusing operation can allow you a more comfort working environment.

Standard model (S)	TS6K	TS10K	31TS10K	....	....
Long run model (L)	TS6KL	TS10KL	31TS10KL	31TS15KL	31TS20KL
Capacity	6Kva/4.8Kw	10Kva/8Kw	10Kva/8Kw	15Kva/12Kw	20Kva/16Kw
Phase	1/1Phase, 1 wire+N+G		3/1APhase, 3 wires+N+G		
Input PF	Above 0.99				
THDI	Less than 6%				
Input Voltage	Low transfer	L-N:176 VAC ±3% @ 100% load: 130 VAC ± 3% @ 50% load			
	Low back	L-N:188 VAC ±3% @ 100% load: 142 VAC ± 3% @ 50% load			
	High transfer	L-N:286 VAC ±3%			
	High back	L-N:270 VAC ±3%			
Input frequency	40-70Hz				
Battery					
DC voltage	192Vdc/240Vdc (inbuilt/external)			192Vdc/240Vdc (external)	
Charge voltage	220Vdc/275Vdc				
Recharging current	4A(L) / 1A(S)			4 / 8A	
Battery type	Lead-acid maintenance-free battery				
Battery quantity	16/20PCS*12VDC				
Output					
Output PF	0.8				
Output voltage	220/230/240Vac +/- 1% (static)				
Frequency	46~54Hz or 56~64Hz (Line mode), 50/60Hz ± 0.1 Hz (battery mode)				
Crest factor	3:1(max)				
Wave distortion	Less than 2% (linear load), less than 4% non-linear load				
Over load	105%<load<12% for 1mins, 125%<load<150% for 30sec				
Transfer time	0ms (AC-battery); 0ms (bypass-inverter)				
Parallel	6PCS(max)				
Indicator					
LCD panel	UPS status, load level, load watt, load VA, battery level, input/output voltage, output current, bus voltage, tem & warning & fault code & events.				
Alarm					
Battery mode	Sounding every 4 seconds (can mute)				
Low battery	Sounding every second				
Overload	Sounding every second				
Fault	Continuously sounding				

Management					
Smart RS-232/USB	Supports windows 2000/2003/XP/Vista/2008,			Windows 7, Linux, Unix & MAC	
Optional	SNMP/AS400				
Environment					
Operation humidity	0-90% RH (non-condensing) @ 0-40°C				
Noise level	Less than 55dBA @ 1 meter			Less than 58dBA @ 1 meter	
Physical					
Net weight (kg)	28(L)/65(S)	29(L)/66(S)	36(L)/66(S)	48	48
Gross weight (kg)	40(L)/77(S)	41(L)/78(S)	48(L)/78(S)	57	57
Dimension/MM (L*H*D)	260*642*582/370*792*682 (Unit/packing)			290*642*600/ 390*810*700 (Unit/packing)	300*600*742/ 420*920*720 (Unit/packing)

*Specification is subject to change without prior notice.

High Frequency Online UPS Energy Saving Star Series 20K-80KVA (3ph in/3ph out)

Key Features

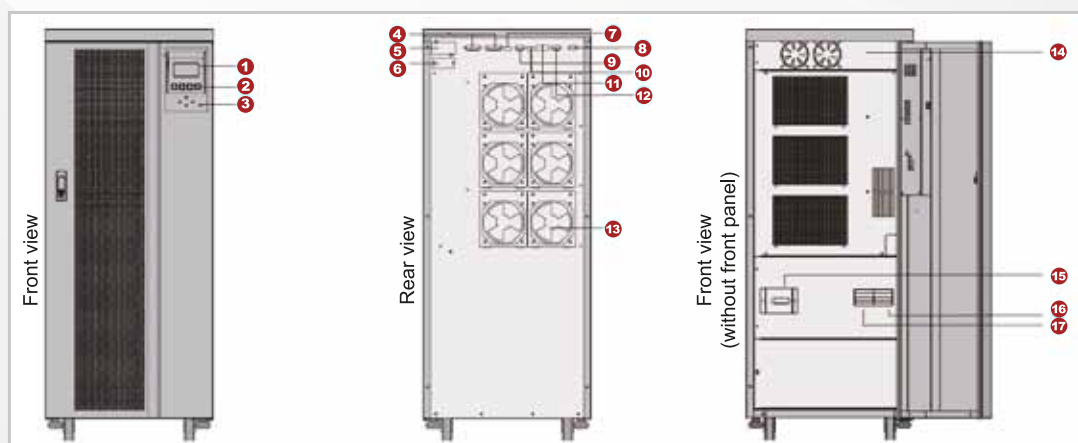
- large LCD display, convenient for operation.
- Advanced IGBT rectification, power factor correction.
- High efficient DSP chip, High efficiency up to 94%.
- Input power factor 0.99, input current harmonic <3%.
- N+X parallel function: connect up to 8 units in parallel for maximum flexibility (no parallel kit required), & compatible to battery share in the parallel mode, which helps the customers to extend the system capacity with lowcost.
- Intelligent management of battery charging & discharging.
- Twin-channel line input.
- Excellent performance in industrial environment protection.

Application

- Small & medium sized data centers, network management centers computer rooms for enterprises, control center for manufacture, transportation, energy source etc. field, & for industrial precision production & test equipment (like SMT, AI equipment), As power supply & protects



Exterior figure of UPS ES33 30K & 40K



- | | | | | |
|-----------------------|---------------------|------------|-----------------------|-----------|
| 1 LCD panel | 5 Intelligent slot | 9 AS400 | 13 Fan | 17 Main 1 |
| 2 Button | 6 Extended slot | 10 EPO | 14 CHGR fan | |
| 3 LED indicator light | 7 Ext. battery temp | 11 RS485 | 15 Maintenance switch | |
| 4 Parallel | 8 RS232 | 12 Service | 16 Main 2 | |

Model		ES33 20K	ES33 30K	ES33 40K	ES33 60K	ES33 80K
Capacity (VA/W)		20KVA/16KW	30KVA/34KW	40KVA/32KW	60KVA/48KW	80KVA/64KW
Rectifier input	Rectifier type	IGBT-based vector controlled PFC(PF corrected)				
	Input voltage	380/400/415VAC (accepted from 305 to 477 without battery use)				
	Input frequency	50Hz or 60Hz (accepted range from 40 to 70)				
	Input current THD	<3% (without any filter)				
	Input power factor	≥0.99(without any filter)				
Bypass input	Power walk-in	5 to 30s (selectable)				
	Input voltage	380/400/415VAC				
Battery	Battery type	VRLA (valve regulated lead acid) or wet/ flooded or NiCd				
	End-cell voltage	1.60-1.90VDC (for VRLA)				
	DC ripple current (float)	<5% (of DC10 AH capacity) RMS value				
	DC ripple voltage (float & const V Ch)	<1% (RMS value)				
	Temp. comp. charge	Standard (where internal batteries 10,15,20,30Kva) & optional (for all other battery configurations)				
Output	Inverter type	IGBT-based vector, repetitive & PI controlled				
	Output voltage	380/400/415/VAC±5 regulation (3-phase RMS average)				
	Output frequency	50/60Hz (±0.05)				
	Output voltage THD	1 % (max)				
	Max. load crest factor	3:1 (compliant with IEC 62040-3)				
	Transient volt. resp	10 ms to recover ±0.5 of normal voltage for 0% to 100% or 100% to 0% step load				
	Max. leading PF load	Up to 0.9				
	Voltage displacement	120°±10° (with 100% unbalanced load)				
Efficiency	Overload	110% for 60 minutes, 125% for 10 minutes, 150% for 1 minute				
	AC-AC	Up to 96%				
EMC-Class		Class -A (applicable for both radiated & conducted)				
Environmental	Storage temp.	-20-70°C (UPS) & -20-30°C (battery)				
	Operating temp.	0-40°C (UPS) & 25°C±5°C (battery)				
	Relative humidity	0-95% (non-condensing)				
	Maximum altitude above mean sea level	1000m (as per IEC 62040/3)				
Main unit	Dimension (W*D*H) mm	420*643*956	470*710*1150	470*710*1150	673*835*1150	673*835*1150
	Weight (Kg)	122	160	164	450	510
	UPS Enclosure IP	IP 20 (even with open front door)				

*Specification is subject to change without prior notice.

Low Frequency Online UPS High Efficiency Star Series HE33 10K-200K (3ph in/3ph out)

Key Features

- DSP control
- Double CPU control
- Modularize
- Battery can be sharing
- Up to 8 units in parallel
- Compatible with generator
- Manual maintenance bypass
- Wide input voltage range
- High output power factor
- Strong environmental adaptability
- Advanced battery management
- N+X parallel redundancy
- Strong shock resistance ability
- EPO function
- Full protection against over-discharge, overcharge, over load



Application

- Large-medium computer data center, industrial process and other mission-critical equipment

Model		HE33 Series UPS										
Capacity (VA)		10K	15K	30K	40K	60K	80K	100K	120K	160K	200K	200K
Nominal output capacity		8KW	12KW	24KW	32KW	48KW	64KW	80KW	96KW	128KW	160KW	160KW
Operate type		Double conversion online type										
Input	Nominal voltage	220V/380, 230/400, 240/415V										
	Voltage tolerance	380/400/415V±25%										
	Frequency	50Hz/60Hz±5%										
	Permitted frequency Tolernace	±2% (selectable from ±1% to 5% from the front panel)										
	Soft start input power	0-100% in 30" (selectable)										
	Factor	0.95 (with input filter)										
	Standard features	Back feed protection seperable bypass line										
Phase		Three phase +N+G										
Output	Voltage	220V/380, 230/400, 240/415V, ±1% (stable load), ±5% (active load)										
	Frequency	50/60Hz (±5%, AC mode), 50/60Hz (±1%, Battery mode)										
	Static stability	±5% in 19ms										
	Distortion	Linear load <3%, non linear load<5%										
	Power factor	0.8										
	Output wave	Pure sine wave										
	Crest factor	3:01										
Battery voltage	Standard battery voltage	384V			432V				480V			
	Floating charge	432V			486V				540V			
	Terminal voltage	336V			378V				420V			
	Charge current	1A-50A (Can calculate and set according to battery configuration software)										
Maximum Discharge Current		28	42	56	85	113	169	225	282	338	381	507
Main Function	Active voltage change	0-100%±5%										
	Instant recover time	<10ms										
	Imbalance voltage	<±5%, <±1%(Balance load voltage)										
	Overload capacity	125%→10min, 150%→1min										
	Static switch	Automatic										
	Protection	UPS over current, short circuit, battery low voltage, over heat										
	Cold method	Compel aeration (temperature control mode)										
	Noise	60-65dB										
	Display	LED, LCD display										
	Remote signalling	Voltage-free contacts										
	Remote commands	EPO and bypass										
	Communication Port (Optional)	Double RS232 + remote contacts + 2 communication interface slots										
	Alarm	Alarm with buzzer and indicators										
Environment	Temperature: 0-40C Humidity: 0-90%											

*Specification is subject to change without prior notice.

High Frequency Online UPS Super & Green Star Series 6K-20Kva (1ph in/1ph out & 3ph in/1ph out)

Key Features

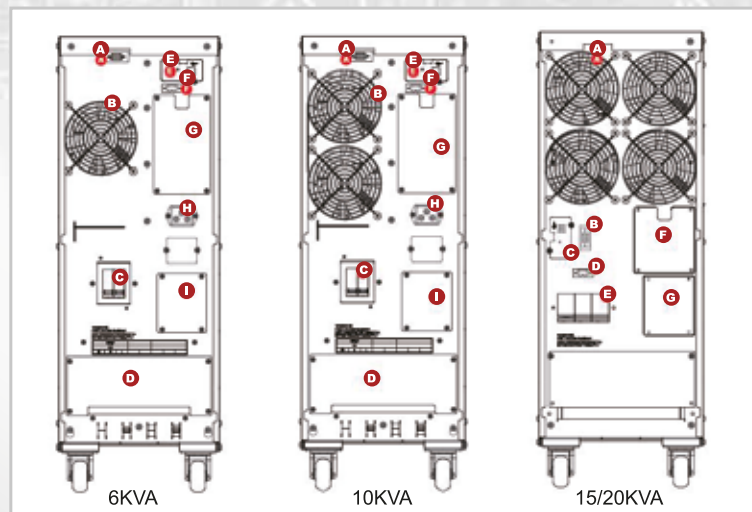
- Large blue LCD Display
- Pure sine wave power supply system, with bypass repair switch, It can provide a reliable,high quality AC power source to the precision equipments, can be used widely in different fields.
- Widely used to computer equipments, telecommunication systems and Industrial automatic control equipments.
- Truly online design, different from offline, it can adjust the input voltage, filtering, when the AC break off, the UPS will provide an uninterruptible power source from the backup batteries.

- UPS will change to bypass mode when overloading or inverter fault, when overloading remove, UPS will turn to inverter mode automatically.
- N+X Parallel Redundancy and Capacity expansion for 6-20K(up to three units)



Application

- Servers, Data-center, critical network devices, Sensitive electronic equipment, Telecom...



6KVA

- A** Communication port
- B** Cooling fan
- C** Input breaker
- D** Terminal blocks cover
- E** Intelligent slot/USB port (optional)
- F** EPO
- G** Parallel Port
- H** External Battery (for long backup time UPS only)
- I** Maintenance bypass switch

10KVA

- A** Communication port
- B** Cooling fan
- C** Input breaker
- D** Terminal blocks cover
- E** Intelligent slot/USB port (optional)
- F** EPO
- G** Parallel Port
- H** External Battery (for long backup time UPS only)
- I** Maintenance bypass switch

15/20KVA

- A** Fan
- B** RS232
- C** Intelligent slot/USB port (optional)
- D** EPO
- E** Input breaker
- F** Parallel Port
- G** Maintenance bypass switch

Super star series	LED model	S6K	S10K	S6KL	S10KL	31S10K	31S10KL	31S15KL	31S20KL
Green star series	LCD model	S6K	S10K	S6KL	S10KL	31S10K	31S10KL	31S15KL	31S20KL
Capacity	VA/W	6KVA/ 4.2KW	10KVA/ 7KW	6KVA/ 4.2KW	10KVA/ 7KW	10KVA/ 7KW	10KVA/ 7KW	15KVA/ 10.5KW	20KVA/ 14KW
Input	Nominal Voltage	220/230/240VAC				380VAC			
	Voltage Range	176-276VAC				304-478VAC			
	Frequency Range	50Hz: 46~54Hz; 60Hz: 56~64Hz							
	Phase	Single phase with ground				Three phase (4 wires+ground)			
	Power Factor	≥0.97				≥0.95			
Output	Voltage	220/230/240*(1±1%)VAC							
	Frequency	50/60Hz(Adjustable) 50/60Hz AC Mode: Follow AC Mode (AC Range 50Hz: 46~54Hz, 60Hz: 56~64Hz); Battery Mode: 50/60Hz(1±0.2%)							
	Wave Form	Pure Sine Wave							
	Power Factor	0.7(0.8 Optional)							
	Harmonic Distortion	=<2% THD (Linear Load), =<6% THD (Non-Linear Load)							
	Overload Capacity	105%-130% for 10 min, 130% for 1min							
	Current Crest Ratio	3:1							
	Connections	Terminal block							
Efficiency	To AC Mode	88%				85%			
	To Battery Mode	87%							
Battery	Type	Sealed lead acid maintenance free battery							
	Nominal DC voltage	240VDC							
	Quantity	20pcs*	12V 7.2Ah	Depends on requested back-up time		20pcs* 12V 7.2Ah	Depends on requested back-up time		
	Back-up Time (Full load)	≥7mins	≥5mins	Depends on the capacity of internal battery bank		≥5mins	Depends on the capacity of internal battery bank		
	Recharge Time	7 hours to 90%		Depends on the capacity of internal battery bank		7 hours to 90%	Depends on the capacity of internal battery bank		
	Charge current (MAX)	2.0A		4.2A or 8A		2.0A	4.2A or 8A		
	Charge voltage	274Vdc ± 1%V							
Bypass	Automatic Transfer	On overload and UPS failure							
	Before UPS Power-on	Default "ON" user adjustable to "YES"							
Transfer Time	Zero								
Indicators	LED Display	UPS status, , Battery capacity, Loading, Fault code							
	LCD Display	I/P&O/P Voltage&Frequency, Battery Voltage							
Audible Alarm	Bypass, On battery mode, Battery low, Overload, Fault								
Acoustic noise	At 1 meter distance	<55dB						<60dB	
Communication	Intelligent RS232 serial port	Windows 98/NT/2000/XP/2003, Linux, Sun Solaris, IBM Aix, Compaq True64, SGI IRIX FreeBSD, HP-UX, and MAC							
	SNMP (Optional)	Power management from SNMP manager and web browser							
	USB (Optional)	Windows family software and Mac OS							
Environmental	Operating Temperature	0~40°C							
	Operating Humidity	20~90% (Non Condensing)							
Weight	Net weight (kg)	84	93	35	38	88.5	39.5	58	58
UPS Dimension	L*W*H (mm)	570x260x717							

*Specification is subject to change without prior notice.