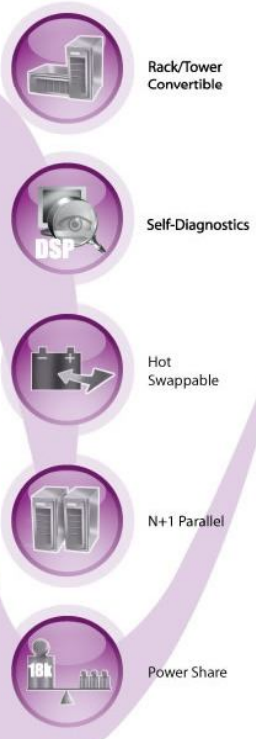
Odin Convertible Series On-line UPS

The Odin Convertible series on-line double conversion UPS with minimized depth is an ideal solution for telecom application environment. An advanced Digital On-line double conversion UPS. The Odin includes industry leading green input power factor, input harmonics and superior output power factor is perfect for mission critical applications.

- Rack/Tower Convertible Design
- Advanced Digital Control Technology
- Double Conversion Online Technology
- Unity Input Power Factor
- Superior Output Power Factor Performance
- Simple Parallel Installation for 6/10Kva
- Emergency Shutdown Control through EPO
- Hot Swappable Battery
- Matching Battery Cabinet
- Extended Runtime Capability
- Powerful Built-in Charger
- Wide Input Voltage and Frequency Windows
- Programmable Receptacles
- Customer Options Slot
- Optional External Bypass Switch



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Unique Design for Telecom Application Environment

To fit into telecom application environment, the Odin is designed to be within 420~550mm depth, so as to be fitted into telecomm rack cabinets, which normally requires for maximum 600mm depth.

Rack/Tower Convertible Design

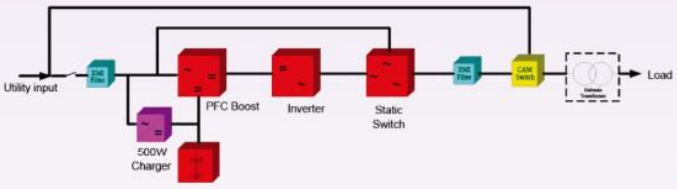
Enables integration into a wide variety of environments.

Advanced Digital Control Technology

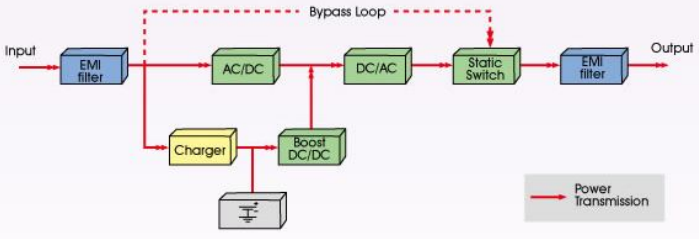
Achieves higher reliability and greater immunity from Utility power problems to the connected load.

Double Conversion Online Technology

Completely re-generates the Utility power to correct power disturbances in the Mains. The unit provides clean AC power with voltage and frequency independent from the Utility.(VFI)



OD 6000/10000



OD 1000/2000/3000

Unity Input Power Factor

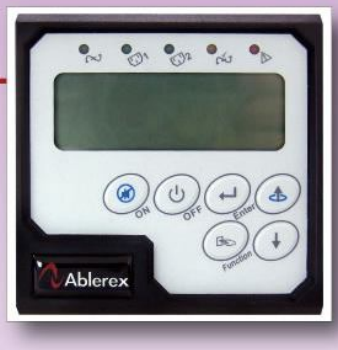
Meets today's industry standard for energy saving and low current harmonic pollution to the Utility.

Superior Output Power Factor Performance
Meets tomorrow's demand today.

Simple Parallel Installation for 6/10Kva
Increasing power capacity and configuring a parallel redundant UPS system up to 3 additional UPS are simply interconnected by using the CAN-bus RJ45 cables on the rear of the UPS.

Emergency Shutdown Control through EPO
Allows users to shut down the UPS in emergency to ensure a safe operating environment.

Optional LCD display also available for 1K~3Kva
Easy-to-read LCD display with compound keypads may not only provide UPS status but enhance functions such as the calibration, setting and service of the UPS.



Hot Swappable Battery
Allows battery replacement without any interruption to the critical load.

Matching Battery Cabinet
Standard matching battery cabinets are available to extend the UPS runtime easily to several hours.

Extended Runtime Capability

Enables users to connect additional battery banks by simply plugging in the battery connectors between the UPS and battery banks without requiring additional chargers.

Powerful Built-in Charger

Provides approximately 1.8A~2.7A charging ability to re-charge internal battery to 90% in 3-5 hours. The charger may be put in the battery bank to extend battery runtime up to maximum required.

For 1~3Kva

Specifications	1K	2K/3K
Model Name	CHR200W	
AC Input		
Voltage Window	80V~288Vac	
Current	2.9A Max	
Frequency	50Hz/60Hz+/-10%	
DC Output		
Voltage(No Load)	41.0+/-0.5Vdc	82.0+/-0.5Vdc
Charging Current	4A	2A
Efficiency(Full Load)	>80%	
Output Capacity	Max. 160W	
Operation Mode	**Constant Voltage with Current Limitation**	
Dimension(WxHxD)mm	195x70x90	
Net Weight(kgs)	0.55	

For 6K~10Kva

AC Input Range	160~280Vac, 45~65Hz
Maximum Power Output	1000W, continuously
Operation Mode	Constant Voltage with Power Limitation
Maximum Parallel Units	Up to 4 units
Protections	Over-temperature, Over-voltage, Against output short-circuit & isolated devices for opposite polarity connection
Mounting	Mounted on the rear of the battery bank or the wall
Dimension(WxHxD)mm	166x282x86
Net Weight(kgs)	3.2

Programmable Receptacles

Remote Reboot and Load Shedding reserving back-up power for critical loads. This feature is only available from 1~3Kva.

Odin

Ablerex

Customer Options Slot

Allows further flexibility in Network configuration. An internal 2nd RS232, USB, WEB/SNMP card or Dry Contact card provides isolated contacts for industrial and remote alarm panel application.

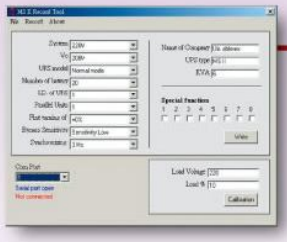
Optional External Bypass Switch

Ensures continuous supply of power to the critical load in the event of electronic failure, overload, over-temperature, or scheduled maintenance.

Model	Rating	AC Input Plug	Connect to UPS Input	Connection to UPS Output & cord length	Output Receptacles/protection
RACPDU-216G	230V 3KVA	IEC C20(16A)	IEC C19(16A)	IEC C20 * 1 Attached 6-foot cord	IEC C13(10A) * 6 with 10A circuit breaker IEC C19(16A) * 1 with 16A circuit breaker

Parallel Distribution Boxes

Model	Description	Dimension(WxHxDmm)	Application
RacPDU-230	Max. 30A	326x88x100	Max. 1pce 6Kva
RacPDU-260	Max. 60A	440x176x124	Max. 2pcs 6Kva or 1pce 10Kva
RacPDU-2120	Max. 120A		Max. 4pcs 6Kva or 2pcs 10Kva
RacPDU-2200	Max. 200A		Max. 4pcs 10Kva



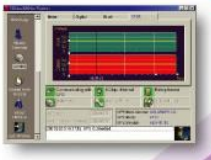
Downloadable Setting Tool

Voltage configuration, UPS mode selection, Output Voltage, Fine Tuning, Bypass Voltage Window, Frequency Synchronized Window and Programmable Outlet Setting can be re-configured by the setting tool.

Communication Capability

The bundled communication software allows the control of the UPS and graceful shutdown when Utility Fails.
Users can:

- Remotely test the major operating functions of the UPS.
- Communicate via SNMP/Web/Network adapter.
- Access UPS functions via the web.
- Alert users via SMS messages against specific events.



Odin Convertible Series On-line UPS

Model	OD1000	OD2000	OD3000	OD6000	OD10000
INPUT					
Voltage(Vac)	120/140/160~288*			160~280Vac**	
Frequency(Hz)	50/60 +/-5Hz(Auto Sensing)				
Phase	Single phase with ground				
Input Power Factor	>0.99(Full Load)				
Current THD(100% linear Load)	<6%				
OUTPUT					
Voltage(Vac)	200/208/220/230/240 selectable			200/208/220/230/240Vac Selectable	
Voltage Regulation	<+/-1% until low battery warning			+/-2%	
Capacity	1000/800	2000/1600	3000/2400	6000/4800	10000/8000
Rated Power Factor	0.8 lagging				
Waveform	Sine Wave, THD <3%(no load to full load)				
Frequency Stability	+/-0.1% unless synchronized to line			+/-0.1%(Free Running)	
Frequency Regulation	+/-1Hz or +/-3Hz				
Transfer Time	0ms				
Crest Factor	3:1				
Efficiency(AC to AC, Normal)	>88%		>90%		
Autonomy	>5min.		>4min.	>8min.	>5min.
Efficiency(AC to AC, ECO)	N/A			Up to 95%	
DC Start	Yes				
BATTERY					
Type	Sealed Lead Acid Maintenance Free				
Capacity	12V/7AH		12V/9AH	12V/7AH	12V/9AH
Quantity	3	6		20	
Voltage	36	72		240	
Recharge Time	4 hours to 90%			4-5 hours to 90%	
Buil+-m Charger(max.Charging current)	1.8A	2.1A	2.7A	1.8A	
DISPLAY					
LCD	Normal, Battery, Bypass, Programmable Outlet1, Programmable Outlet2, Self-test, Battery Weak & Bad, Site Wiring Fault, Overload and Load/Battery Level conditions			N/A	
LED+LCD	Input Voltage, Input Frequency, Output Voltage, Output Frequency, Load Percentage, Battery Voltage & Inner Temperature, Programmable Outlet1, Programmable Outlet2, etc.			Input Voltage Input Frequency, Output Voltage, Output Frequency, Load Percentage, Battery Voltage & Inner Temperature, etc.	
Self-Diagnostics	Upon Power on, Self Diagnostics and software control, 1-hour routine checking			Upon Power on, front panel setting & software control, 24-hour routine checking	
ALARMS					
Audible and Visual	Line Failure, Battery Low, Overload, System Fault…etc.				
PROTECTION					
Overload AC Mode & Backup Mode	<105% continuously <106%~120% for 30 seconds transfer to bypass <121%~150% for 10 seconds transfer to bypass >150% immediately transfer to bypass Buzzer continuously alarm			105%~150% for 160 seconds~2 cycles before switching bypass Buzzer continuously alarm	
Bypass Mode	<105% continuously >106%~120% for 125 seconds shut down >121%~148% for 125~5 seconds shut down > 149%~188% for 2 seconds~0.16 seconds shut down Buzzer continuously alarm			105%~200% for 500 seconds ~ 8 cycles before stopping supply load Buzzer continuously alarm	
Short Circuit	Hold whole System				
Overheat	AC Mode: Switch to Bypass Backup Mode: Switch off the UPS				
Battery Low	Alarm and Switch Off				
EPO	UPS shuts down immediately				
Battery	Advanced Battery Discharge Management			N/A	
Noise Suppression	300 joules				
Heat Dissipation(at full linear load)***	<145W	<290W	<330W	<450W	<600W

Model	OD1000	OD2000	OD3000	OD6000	OD10000
Leakage Current	≦3.5mA				
PHYSICAL					
Dimension WxHxDmm	440x88x405	440x176x405		440x132x550	440x132x680
Input Connection	IEC320-C14		IEC320-C20	Hardwire	
Outlets	6 x IEC320-C13		4 x IEC320-C13 & 1 x IEC320-C19	Hardwire	
Net Weight(kgs/lbs)	15.1	26	26.8	17.5	26
ENVIRONMENT					
Operating Temperature	0℃~40℃				
Temperature Warning	The battery design life is based on a temperature of 25℃ Ambient temperature above this range will reduce battery life.				
Altitude	0~2000m up to 40℃, 3000m up to 35℃				
Humidity	90% RH Maximum, Non-Condensing				
Noise	<50dB(at 1 meter)				
COMPUTER INTERFACE					
Interface Type	Standard RS232 and USB Interface			Standard RS232 Interface	
Communication Slots	2nd RS232, USB, Relay Contact, SNMP/WEB Card, etc.			2nd RS232, USB, RS485, Relay Contact, SNMP/WEB Card, etc.	
Compatible Platforms	Window 95/98/NT/2000/XP/Vista, Novell Netware, Linux, etc.				
SAFETY CONFORMANCE					
Quality Assurance	ISO9001 Certified Company				
Safety Standard	EN62040-1-1				
EMC Standard	EN62040-2, EN61000-3-2, EN61000-3-3				
Marks	CE				

* Based on load(%) – 0~33/33-66/66~100% respectively
** 160~176Vac at <75% load

BATTERY BANK

Model	Battery Type	Maximum Quantity(pcs)	Without Batteries(kgs)	With Batteries(kgs)	Dimension(WxHxD)mm
BBC12M4U007	7 AH	12	8.0	34.0	440x176x420
BBC12K4U009	9 AH			38.0	
BBC20J4U007	7 AH	20	18.0	62.0	440x176x550
BBC20N4U009	9 AH			68.0	

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