

# UPS OPN RACK/TOWER

1kVA to 3kVA



Two directions LCD display



Optional socket



Mini dry contact card



SNMP



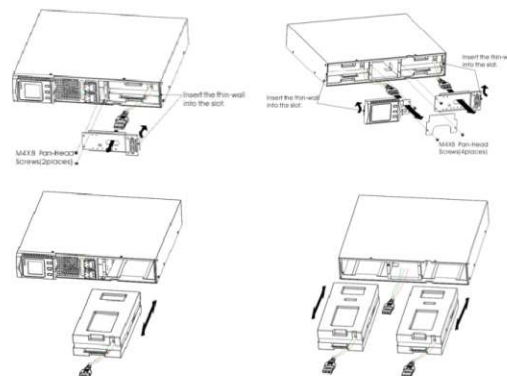
Multifunctional bracket



Rack-Tower convertible



Battery Cabinets (Optional)



Easy for maintenance, hot-swappable battery

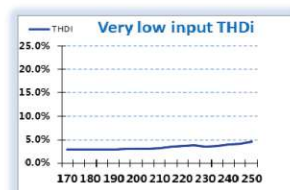
## Features

- True double-conversion
- Wide input voltage range (110~300 Vac)
- Input power factor correction 0.99
- Output Power Factor 0.9
- High power factor charger up to 12A with very low ripple current when charging battery
- Charger current can be setting by LCD
- 50Hz/60Hz frequency converter mode
- Emergency power off function (EPO)
- Eco mode operation for energy saving (ECO)
- Generator compatible
- SNMP/USB/RS232 multiple communications
- Smart battery charger design for optimized battery performance
- Selectable output voltage: 200,208,220,230, 240Vac

- Smart charger current setting base on battery capacity via LCD panel



- Very low input THDi to reduced power system pollution



MODEL		OPN1000RT		OPN2000RT		OPN3000RT	
Phase		Single phase with ground					
Capacity (VA/Watts)		1000VA / 900W		2000VA / 1800W		3000VA / 2700W	
<b>INPUT</b>							
Nominal voltage		200/208/220/230/240Vac					
Operating voltage range	Low line transfer	160Vac ± 5% @100%~80%load 140Vac ± 5% @80%~70%load 120Vac ± 5% @70%~60%load 110Vac ± 5% @60%~0%load (Ambient temp. <35°C)					
	Low line comeback	175Vac ± 5% @100%~80%load 155Vac ± 5% @80%~70%load 135Vac ± 5% @70%~60%load 125Vac ± 5% @60%~0%load (Ambient temp. <35°C)					
	High line transfer	300Vac ± 5%					
	High line comeback	290Vac ± 5%					
Operating frequency range		40~70Hz					
Power factor		0.99					
Generator input		Support					
<b>OUTPUT</b>							
Output voltage		200/208/220/230/240Vac					
Power factor		0.9					
Voltage regulation		± 1%					
Frequency	Line mode (Synchronized range)	47~53Hz or 57~63Hz					
	Bat. mode	(50/60 ± 0.1)Hz					
Crest factor		3:1					
Harmonic distortion (THDv)		≤3% THD with linear load ≤6% THD with non linear load					
Waveform		Pure sinewave					
Transfer time	AC mode <-> Batt. mode	Zero					
	Inverter <-> Bypass	4ms(Typical)					
Efficiency	Line mode	88%		92%		92%	
	Batt mode	85%	86%	87%	88%	89%	90%
<b>BATTERY</b>							
Battery Type		12V9AH		12V9AH		12V9AH	
Numbers		2	3	4	6	6	8
Backup time		Long run unit depends on the capacity of external batteries					
Typical recharge time (Standard mode)		4 hours recover to 90% capacity (Typical)					
Charging voltage		27.4 Vdc ± 1%	41.0 Vdc ± 1%	54.7 Vdc ± 1%	82.1 Vdc ± 1%	82.1 Vdc ± 1%	109.4 Vdc ± 1%
Charge current		1A	12A max	1A	12A max	1A	12A max
<b>SYSTEM FEATURES</b>							
Line Mode Battery Mode	Ambient Temp.<35°C	105%~110%: UPS transfer to bypass after 10minuteswhen the utility is normal 110%~130%: UPS transfer to bypass after 1minute when the utility is normal 130%~150%: UPS transfer to bypass after 5 seconds when the utility is normal >150%:UPS transfer to bypass immediately when the utility is normal					
	35°C<Ambient Temp.<40°C	105%~110%: UPS transfer to bypass after 1minute when the utility is normal 110%~130%: UPS transfer to bypass after 5 seconds when the utility is normal >130%:UPS transfer to bypass immediately when the utility is normal					
Short circuit		Hold whole system					
Overheat		Line mode: Switch to bypass; Backup mode: Shut down UPS immediately					
Under voltage of battery		Alarm and switch off					
EPO (optional)		Shut down UPS immediately					
Audible & Visual alarms		Line failure, Battery low, Over load, System fault					
Communication interface		USB (or RS232), SNMP card (optional), Relay card (optional)					
<b>ENVIRONMENT</b>							
Operating temperature		0 ~ 40°C					
Storage temperature		-25°C ~ 55°C					
Humidity range		20~90% RH @ 0~40°C (Non-condensing)					
Altitude		<1000m					
Noise level		Less than 50dBA @ 1 Meter					
<b>PHYSICAL</b>							
Dimension W × D × H (mm)		440 × 430 × 86.5		440 × 552 × 86.5		440 × 720 × 86.5 440 × 552 × 86.5	
Net Weight (kg)		13.1	7.8	21.1	10.3	28.5	12.3
<b>STANDARDS</b>							
Safety		IEC/EN62040-1,IEC/EN60950-1					
EMC		IEC/EN62040-2,IEC61000-4-2,IEC61000-4-3,IEC61000-4-4, IEC61000-4-5,IEC61000-4-6,IEC61000-4-8					

