

Features:

- True on line double conversion
- **1146 Joule surge protection– Exclusive**
- SNMP card (optional)
- Dry contact card (optional)
- Wide input voltage range (110~300 Vac)
- Input power factor correction 0.99
- **Output power factor 0.9**
- 50Hz/60Hz frequency converter mode
- Emergency power off function (EPO)
- ECO mode operation for energy saving (ECO)
- Generator compatible
- USB communications
- Smart battery charger design for optimized battery performance
- Control panel up to 50 items set by LCD
- Selectable output voltage: 200,208,220,230,240Vac



Specifications

		TOP 1K / LONG	TOP 2K / LONG	TOP 3K / LONG
Phase		Single phase with ground		
Capacity (VA/Wattes)		1000VA/900W	2000VA/1800W	3000VA/2700W
Input				
Nominal voltage		200/208/220/230/240Vac		
Operating voltage	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 transfer	175Vac±5% @100%~80% load, 155Vac±5% @80%~70% load 120Vac±5% @70%~60% load, 110Vac±5% @60%~0% load (Ambient Temp.<35 C)		
	High line transfer	300Vac ±5%		
	High line comeback	290Vac ±5%		
	Operating frequency range	40~70Hz		
Open factor		0.99		
Output				
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 liner load <6% THD with non liner load		
Waveform		Pure sinwave		
Transfer time	AC mode<-> batt.	Zero		
	Inverter <-> bypass	4ms (typical)		
Efficiency	Line mode	88%	92%	92%
	Batt mode	85%	87%	89%
Battery				
Battery type		12V9AH		
Typical recharge time (standard)		4 hours recover to 90% capacity (typical)		
Charging voltage		27.4Vdc ± 1%	54.7Vdc ± 1%	82.1Vdc ± 1%
Charge current TOP 1K-3K		1A		
Charge current TOP 1K-3K LONG		12A		
System Features				
Short circuit		Hold whole system		
Overheat		Line mode: switch to bypass, backup mode, shut down		
Low battery voltage		Alarm and switch off		
EPO		Shut down UPS immediatly		
Audible & visual alarms		Line failure, battery low, overload, ssystem fault		
Communication interface		USB (or RS232), SNMP card (optional), Relay card (optional)		
Environmental				
Operating temperature		0~40°C:100% load / 40~45°C:80% load /45~55°C:60% load / 55~65°C:30% load		
Storage temperature		-25 C~55 C		
Humidity range		20~90% RH @ 0~40 C (non-condensing)		
Altitude		<1500m		
Noise level		Less than 50DbA @1 meter		
Physical				
Dimension WxHxD (mm)		144x209x293	144x209x399	191x337x460
Net weight (kg) TOP 1K-3K		9.8	17	27.6
Net weight (kg) TOP 1K-3K LONG		4	6.4	6.7
Standards				
Safety		IEC/EN62040-1, IEC/EN60950-1		
EMC		IEC/EN62040-2, IEC61000-4, IEC61000-4, IEC610004-4, IEC61000-4-5,		

*Derate to 80% of capacity when the output voltage is adjustable to 200/208Vac



**Product specifications are subject to change without further notice