This section provides the following specifications:

- Communication options
- Model lists
- Weights and dimensions
- Electrical input and output
- Environmental and safety
- Battery



Communication Options (All Models)

Communication Bay	available independent communication bay for connectivity cards
Compatible Connectivity Cards	SNMP card /Contact Relay Card
Communication Ports	RS232 (DB-9): 2400 bps USB

Extended Battery Model

EBP Model	Configuration	Battery Voltage	For Power Ratings
1K	RT	24Vdc	1000 VA
2K		48Vdc	2000 VA
3K		96Vdc	3000 VA

Table 12. UPS Model List (All Models)

Model	Power Level	Rear Cover Diagram
1K- **Rackmount**	1000 VA / 800W	Figure 26
2K- **Rackmount**	2000 VA / 1600W	Figure 27
3K- **Rackmount**	3000 VA / 2400W	Figure 27

Weights and Dimensions (All Models)

Model (Rackmount UPS)	Dimensions (W *D *H)	Weight
1K- **R**	440*430*86.5mm	15.7 kg

2K- **R**	440*572*86.5mm	26.3 kg
3K- **R**	440*696*86.5mm	33.0kg
Model	**Dimensions (W *D *H)**	**Weight**
1K	440*430*86.5mm	19.0 kg
2K	440*572*86.5mm	33.6kg
3K	440*690*86.5mm	46.0 kg

Electrical Input (All Models)

Nominal Frequency	50/60 Hz auto-sensing
Frequency Range	45–55 Hz(50Hz)/55-65Hz(60Hz) before transfer to battery
Bypass Voltage Range	+5%,+10%,+15%,+25%(+25% by default),-20%,-30%,-45%(-45% by default)

Electrical Input (All Models)

Model Default Input (Voltage/Current)		**Selectable Input Voltages**	**Voltage Range at 100% Load**
1K	230V / 3.6A	200 ,208 ,220 ,230 , 240	160 - 290Vac
2K	230V / 7.3A	200 ,208 ,220 ,230 , 240	160 - 290Vac
3K	230V / 11.9A	200 ,208 ,220 ,230 , 240	160 - 290Vac

Table 16. Electrical Input Connections (All Models)

Model Input Connection		**Input Cable**
1K	IEC320 C13-10A	IEC320 C14-10A
2K	IEC320 C20-16A	IEC320 C19-16A
3K	IEC320 C20-16A	IEC320 C19-16A

Electrical Output (All Models)

	High Voltage Models
Nominal Outputs	200/208/220/230/240V
	(voltage configurable or auto-sensing)
	1000/2000/3000 VA
	0.8/1.6/2.4 kW
Frequency	50 or 60 Hz, autosensing
Output Overload (Normal Mode)	108%±5%–150%±5%: Load transfers to Fault mode after 30 seconds.
	150%±5%–200%±5%: Load transfers to Fault mode after 300 ms.
	>200%±5%: Load transfers to Fault mode after 20 ms.
Output Overload (Bypass Mode)	100%±5%–130%±5%: Load transfers to Fault mode after 20 minutes.
	130%±5%–150%±5%: Load transfers to Fault mode after 2 minutes.
	150%±5%–200%±5%: Load transfers to Fault mode after 15 seconds.
	>200%±5%: Load transfers to Fault mode after 140 ms.
Output Overload (Battery Mode)	108%±5%–150%±5%: Load transfers to Fault mode after 30 seconds.
	150%±5%–200%±5%: Load transfers to Fault mode after 300 ms.
	>200%±5%: Load transfers to Fault mode after 20 ms.
Voltage Waveform	Sine wave
Harmonic Distortion	<3% THD on linear load; <5% THD on non-linear load
Transfer Time	Online mode: 0 ms (no break)
	High Efficiency mode: 10ms maximum (due to loss of utility)
Power Factor	0.8
Load Crest Factor	3 to 1

Electrical Output Connections (All Models)

Model	Output Connections	Output Cables
1K- **RT**	(IEC C13-10A)*6	IEC320 C14-10A
2K- **RT**	(IEC C13-10A)*6	IEC320 C14-10A
3K- **RT**	(IEC C13-10A)*6 (IEC C19-16A)*1	IEC320 C14-10A IEC320 C20-10A

Environmental and Safety (All Models)

208/230/240 Vac Models	
Surge Suppression	EN 61000-2-2
	EN 61000-4-2, Level 4
	EN 61000-4-3, Level 3
	EN 61000-4-4, Level 4 (also on signal ports)
	EN 6100-4-5, Level 4 Criteria A
EMC Certifications	CE per IEC/EN 62040-2,
	Class B
	Class B
EMC (Emissions)	IEC 62040-2:ed2:2005 / EN 62040-2:2006
Safety Conformance	IEC 62040-1-1, IEC 60950-1
Agency Markings	CE
Operating Temperature	0°C to 40°C (32°F to 104°F) in Online mode, with linear derating for altitude
	NOTE Thermal protection switches load to Bypass in case of overheating.
Storage Temperature	-20°C to 40°C (-4°F to 104°F) with batteries
	-25°C to 55°C (-13°F to 131°F) without batteries
Transit Temperature	-25°C to 55°C (-13°F to 131°F)

Relative Humidity	0–90% noncondensing
Operating Altitude	Up to 3,000 meters (9,843 ft) above sea level
Transit Altitude	Up to 10,000 meters (32,808 ft) above sea level
Audible Noise	<55 dBA at 1 meter typical
Leakage Current	<1.5 mA

Battery

Internal Batteries		
Battery Configuration	1K : 24Vdc (2 ,12V, 9 Ah) 2K : 48Vdc (4 ,12V, 9 Ah) 3K : 72 Vdc (8,12V, 9 Ah)	
Fuses	(2) 30A/250Vdc fuses	(4) 30A/250Vdc fuses per EBP
Type	Sealed, maintenance-free, valve-regulated, lead-acid, with minimum 3-year float service life at 25°C (77°F)	
Monitoring	Advanced monitoring for earlier failure detection and warning	
Recharge Time (to 80%)	Internal batteries: 3 hours	external batteries: 8 hours
Battery Port	External 2-pole Anderson connector on UPS for connection	



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