Small UPS

Features :

- Double conversion on-line topology
- Fully Microprocessor controlled design
- High input power factor
- Advance battery management
- Wide Input Voltage range
- Automatic bypass
- Smart self diagnosis function
- Full time lightning and Surge Protection
- UPS monitoring software
- SNMP Adaptor for Network Management (optional)

Medium Power UPS

Features:

- Double conversion online UPS
- Advanced rectifier design
- High input power factor
- State-of-the-art digital control
- Network connectivity
- Compliance to International Standards

High Power UPS

Features:

- Double conversion online UPS
- Advanced power factor compensated rectifier
- High input power factor
- Digital control
- Network connectivity
- Compliance to International Standards

Technical Specification

Model	PLM 10	PLM 20	PLM 30	PLM 10 EXT	PLM 20 EXT	PLM 30 EXT	PLM 75	PLM 120
Capacity	**1KVA /700W**	**2KVA /1400W**	**3KVA /2100W**	**1KVA /700W**	**2KVA /1400W**	**3KVA /2100W**	**7.5KVA /4.9KW**	**12KVA /8KW**
INPUT								
Rated Voltage	230 VAC Single Phase							
Voltage Range	160V-275V(Full Load);130V-160V(70% load)						156V-280V (Full Load), 120V-156V (70% load)	
Frequency	50 Hz +/- 4.8Hz						50Hz +/-5Hz (Programmable)	
Power Factor	>0.97						>0.00(at normal line & full load)	
OUTPUT								
Inverter Design Principle	PWM IGBT with microprocessor control							
Voltage	220V/230 V/240V Single phase							
Regulation	nominal +/- 2%							
Frequency	50Hz +/- 0.05Hz						50Hz+/-0.5 Hz	
Wave Form	Pure sine Wave							
Total harmonic Distortion	<3% on linear load;6% on computer load.							
Crest factor	3 to 1							
Overload capacity	125% for 3 mins;150% for 30 secs;>150% for 1sec						125% for 1 min,150% for 30 secs;150% for 16 cycles	
Battery								
DC Voltage	36V	72 V	72 V	36V	72 V	72 V	240VDC	240VDC
Battery AH capacity	7 AH	7 AH	9 AH				to be selected depending upon backup time	
Battery Type	Sealed Maintenance free lead acid type							
Maximum Charging current				4.5A	4.5A	4.5A		
Max. Recommended (External) Battery				3x12V65AH	3x12V65AH	3x12V65AH		
LED/Alarm Indication								
LED status	On-line,Bypass,On-battery,Overload,Battery low,Fault,battery Replace,Battery level,Load Level.						Normal, Battery, Bypass, Fault	
Alarm	Buzzer							
Interface								
DB 9	Standard RS 232/Dry contact							
SNMP Slot	Internal(Optional)							
RS-232							Standard	
Dry Contact							Standard	
SNMP Function							Optional	
Environmental								
Operating Temperature	0-40 deg C							
Humidity	0% to 90%(non-condensing)						5% to 95% (non-condensing)	
Noise Level	40dBA	42dBA		40dBA	42dBA		<53 dBA	<55dBA
Dimensions								
W x D X H	140 x 363 x 242mm		140x422x373 mm	140 x 363 x 242mm		140x422x373 mm	56.3mmx 444.5 mm x 130.6 mm	
Weight	15Kg	29Kg		8.2Kg	15.2Kg	15.5Kg	20.5Kg	24.5Kg

Technical Specification

Model	Single-Phase Output					Three-Phase Output			
KVA Rating	10,15,20,30,40 KVA					10,20,30,40 KVA			
INPUT									
Rectifier Design	Advanced rectifier with SMPS charger								
Nominal Voltage	415 V AC (-20% to + 15%) * 3 Ph & N								
Nominal Frequency	50 Hz (+/-6%)								
Input Power Factor	> 0.93								
OUTPUT									
Inverter Design	**IGBT based PWM with Digital control**								
Voltage	230 V AC (220/240, selectable) 1 Ph & N					400 V AC (380/415, selectable) 3 Ph& N			
Regulation	(+/-1%)					(+/-1%) for balanced load			
						(+/-)2% for 100% unbalanced load			
						<= 1° for balanced load			
						<=2° for 100% unbalanced load			
Frequency	50 Hz (+/-0.25 Hz) in free running mode, (+/- Hz) in synchronous mode								
Waveform	True Sinewave								
Total Harmonic Distortion	2% on linear load & < 5% on non-linear load (Ref IEC62040 - III)								
Crest Factor	3:1								
Overload Capacity	125% for 10 minute; 150% for 60 s (Inverse time characteristics)								
Dynamic Response	Complies to IEC 62040 III - Class1								
Duty	Continuous								
ENVIRONMENTAL									
Ambient Temperature	0 to 40°C								
Humidity	Up to 90% RH, Non Condensing								
Altitude	< 1000 meter, above sea level								
PHYSICAL									
Enclosure Protection	IP - 20								
Cooling	Forced air								
Colour	RAL 7035 (Hawells Gray)								
Cable Entry	Bottom, Rear								
TESTING STANDARDS	**IEC 62040 - PART III**								
	LN 3100					LN 3300			
Rating (in KVA)	10	15	20	30	40	10	20	30	40
Battery Voltage	240V	240V	300V	360V	360V	240V	300V	360V	360V
Acoustic Noise	< 60 dbA	< 60 dbA	< 60 dbA	< 62 dbA	< 65 dbA	< 60 dbA	< 62 dbA	< 65 dbA	< 65 dbA
Overall Efficiency	up to 91%								
Dimension									
Width (in mm)	400	400	1200	600	600	400	600	600	600
Depth (in mm)	800	800	900	900	900	800	900	900	900
Height (in mm)	1080	1080	1330	1330	1330	1080	1330	1330	1330
Approx Weight(in kg)	200	250	300	400	450	250	375	500	600

Technical Specification

Model	Single-Phase Output	Three-Phase Output
KVA Rating	60, 8 KVA	60,80,100,120,160,200,250,300 KVA
INPUT		
Rectifier Design	Advanced rectifier with SMPS charger	
Nominal Voltage	415 V AC (-20% to + 15%)(+/- 15% for 250 & 300 KVA) * 3 Ph & N	
Nominal Frequency	50 Hz (+/-6%)	
Input Power Factor	> 0.93 (> 0.95 for 250 / 300 KVA)	
	BETTER ON REQUEST	
OUTPUT		
Inverter Design	**IGBT based PWM with Digital control**	
Voltage	230 V AC (220/240, selectable) 1 Ph & N	400 V AC (380/415, selectable) 3 Ph& N
Regulation	(+/-1%)	(+/-1%) for balanced load
		(+/-)2% for 100% unbalanced load
		<= 1° for balanced load
		<=2° for 100% unbalanced load
Frequency	50 Hz (+/-0.25 Hz) in free running mode, (+/- Hz) in synchronous mode	
Waveform	True Sinewave	
Total Harmonic Distortion	2% on linear load & < 5% on non-linear load (Ref IEC62040 - III)	
Crest Factor	3:01	
Overload Capacity	125% for 10 minute; 150% for 60 s (Inverse time characteristics)	
Dynamic Response	Complies to IEC 62040 III - Class1	
Duty	Continuous	
ENVIRONMENTAL		
Ambient Temperature	0 to 40°C	
Humidity	Up to 90% RH, Non Condensing	
Altitude	< 1000 meter, above sea level	
PHYSICAL		
Enclosure Protection	IP - 20	
Cooling	Forced air	
Colour	RAL 7035 (Hawells Gray)	
Cable Entry	Bottom	
TESTING STANDARDS	**IEC 62040 - PART III**	

	1Ph / 3 Ph Output		**3 Ph Output**					
Rating (in KVA)	60	80	100	120	160	200	250	300
Battery Voltage	360V	360V	360V	360V	360V	360/384V	408V	408V
Acoustic Noise	< 68 dbA	< 70 dbA	< 70 dbA	< 72 dbA	< 72 dbA	< 74 dbA	< 75 dbA	< 75 dbA
Overall Efficiency	up to 92%		up to 93%					
Dimension								
Width (in mm)	900	900	1200	600+1000	600+1000	600+1200	1000+1200	1000+1200
Depth (in mm)	800	800	900	900	900	800	900	900
Height (in mm)	1960	1960	1960	1960	1960	1960	1960	1960
Approx Weight(in kg)	800	900	1200	1400	1500	2400	2600	2800