



## Power Conversion :

### • AC OUTPUT VOLTAGE CONVERSION

220<sup>Vac</sup>  
SYSTEM → 240V → 230V → 220V → 200VAC

110<sup>Vac</sup>  
SYSTEM → 120V → 115V → 110V → 100VAC

### • AC OUTPUT FREQUENCY CONVERSION

50/60<sup>Hz</sup> → 50Hz → 60Hz



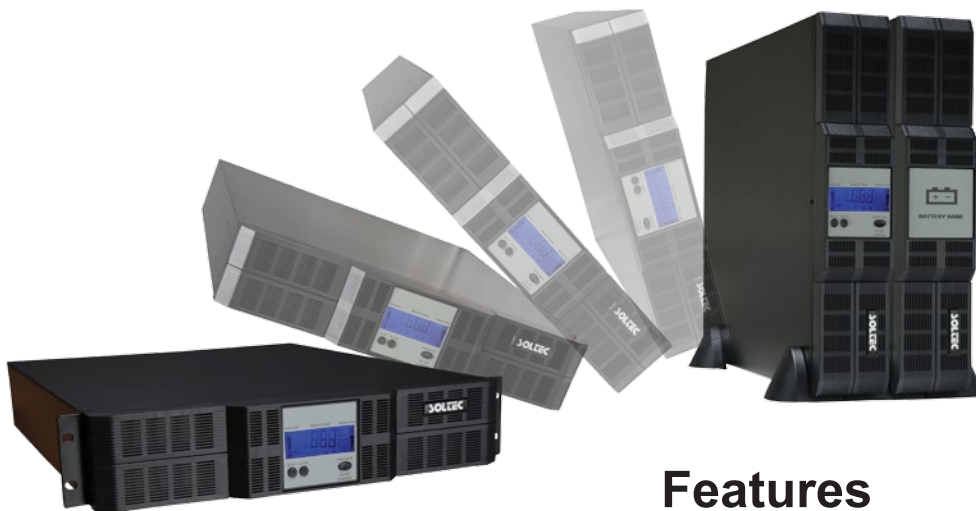
## PS / PR Series 1.5-10kVA

True On-Line Double Conversion  
**UPS / Voltage-Frequency Converter**

สำรองไฟ / ปรับแรงดัน - ความถี่ไฟฟ้า

**PS** — Tower Type

**PR** — Rack Mount + Tower Type (2-in-1)



## Features

- True Online Double Conversion Topology (VFI)
- New Full Bridge Inverter Design, Generator Compatible
- Wide Input Range and Input Power Factor Correction
- Smart Backup Time Estimation Showing on LCD Display
- All-in-one Button for Self-test, Alarm - Reset & DC Start
- Hot - Swappable Batteries for Rack Models
- AC Start function for Auto-Turn On output of Inverter
- Cold-Start & Automatic restart of loads after UPS shutdown
- On-Chip Repairing Program for Service
- Network Manageable; AS400, SNMP (Optional)
- N+X Parallel & Programmable Receptacles (Optional)
- Eco / Green mode & Optional for EPO function



## Applications :

- Computer & Networking
- Automation & PLC
- Medical & Lab Equipment
- Metrology & Precision Devices
- Medical & Lab Equipment



# \* SPECIFICATIONS : True On-line High Frequency UPS

Appearance >		PS Series			PR Series		
		PS1101S PS1102S PS1103S	PS1106S PS1110S		PR1101S PR1102S PR1103S	PR1106S PR1110S	
*PS	Tower Type ▶	1101S	1102S	1103S	1106S	1110S	
*PR	Rack mount Type ▶	1101S	1102S	1103S	1106S	1110S	
<b>Power Rating</b>	<b>kVA / kW</b>	<b>1.5 / 1.2</b>	<b>2 / 1.6</b>	<b>3 / 2.4</b>	<b>6 / 4.8</b>	<b>10 / 8</b>	
<b>INPUT</b>							
Voltage (Vac)	100V / 110V / 115V / 120V Selectable or 200V / 220V / 230V / 240V Selectable						
Voltage Range	110V Models : ***50V ~ 143V ; 220V Models : ***100V ~ 285V						
Frequency (Hz)	Under Frequency Converter Mode, 40 ~ 70Hz ***						
Power Factor	≥ 0.99						
<b>OUTPUT</b>							
Voltage (Vac)	100V / 110V / 115V / 120V Selectable or 200V / 220V / 230V / 240V Selectable (208V optional)						
Wave Form, THD	Pure Sine wave, THD < 3% (At Full Resistive Load)						
Crest Factor	3:1						
Frequency (Sync to Mains)	Auto Detect for 50 / 60Hz (When power on) 50 ± 0.1% or 60 ± 0.1%						
Frequency (Not Sync to Mains)	50 ± 0.1Hz or 60 ± 0.1Hz (***)Frequency Converter Mode)						
Regulation	±1% of Selected Output Voltage (Adjustable by Using the Setting Software)						
Transfer Time (AC to DC)	Zero msec						
Over Load Protection	>100% Overload Alarm; 100% ~ 115% for 60 Seconds, Then Transfer to Bypass Mode; 1 15% ~ 135% for 10 Seconds, Then Transfer to Bypass Mode; >135% for 2 Seconds, Then Transfer to Bypass Mode; If Bypass Mode is Not Available, Then UPS will Shutdown the O/P Power						
Efficiency (AC to AC / Eco Mode)	Up to 96%						
<b>BATTERY</b>							
Voltage (Vdc)	36Vdc		48Vdc	72Vdc	144Vdc	192Vdc	
Battery Type (Battery Inside)	Seal Lead-Acid Maintenance Free						
	Tower UPS :	12V 7Ah x 3	12V 7Ah x 4	12V 7Ah x 6	12V 7Ah x 12	12V 7Ah x 16	
	Rack Mount UPS ▶	12V 7Ah x 3 (Battery Inside)	12V 7Ah x 4 (Battery Inside)	12V 7Ah x 6 (Battery Inside)	12V 7Ah x 12 (External : 3U)	12V 7Ah x 16 (External : 3U)	
Typical Backup Time	15 Minutes Depends On Load						
Charging Method	CC + CV With Floating / Trickle Charging Voltage 13.2 ~ 13.9 Adjustable						
Recharge Time	**2-4 / 5-7 Hrs to 90% (Selectable)						
Protection	Over Current Protection. Over Charging Voltage Protection						
Monitoring	Battery Status Display, Smart Monitoring For Battery Failed or Battery Open Circuit Detection and Warning, Auto-Detect Each Time When Power On and Auto Repeat the Detection Every 6 Days						
<b>SYSTEM FEATURES</b>							
Communication Interface	UPS Control & Monitoring Software (UPSilon2000) Compatible, RS232 + USB, RJ45 / DB9 / SNMP (Optional)						
Control Panel	LCD or **LED (Optional)						
Audible Alarm	On Battery Alarm, Low Battery Alarm, Over Load Alarm, Short - Circuit Alarm, Thermo Alarm						
EBT (Estimation of Backup Time System)	Support for LCD Display						
Green Mode Function (Auto Bypass When O/P Load Level Tool Low)	1% to 14% of Full Load (Adjustable by Using the Setting Software) The Default Setting is OFF						
Temp. / Humidity	0°C to 40°C (32°F to 104°F) / 0 - 95% Non Condensing						
Audible Noise (At 1 Meter From Surface Of Unit)	≤ 40 dBA						
Overall Protections	Automatic & Manual Bypass Switch, Automatic Self-Test System, Over Load, Over & Under Voltage, Surge & Spike, Short Circuit, EMI / RFI Noise Filter, Overheat, Battery Discharge Limit, No Load Auto Shutdown						
<b>PHYSICAL</b>							
Dimension (cm) (W x D x H)	Tower UPS :	20 x 45 x 18		20 x 51 x 18		20 x 51 x 36	
	Rack Mount UPS ▶	44 x 43 x 2U		44 x 51 x 2U		44 x 51 x 3U (External battery cabinet)	
Weight (kg)	Tower UPS :	14kg	17kg	23kg	87kg	98kg	
	Rack Mount UPS ▶	18kg	21kg	27kg	91kg	102kg	

\* Specifications are subject to change without prior notice.

\*\* Optional Specifications

\*\*\* De - Rate the Capacity When I/P Voltage is Between 50Vac ~85Vac, or 100Vac ~ 170Vac

\*\*\* De - Rate 80% of Capacity in Frequency Converter Mode.

Spec. STD.26-03-19



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