

# PPUA-3000N SERIES

Improve the output voltage characteristics with symmetrical switching technique which is 32Bit DSP (Digital Signal Processor) to realize precise control with high-speed real-time control using a parallel drive system expansion easy when (standby parallel load sharing) equipment. Base on RS-232 or RS485 protocol, enable remote monitoring and control with built-in communication Port.

## Transformer-Free UPS

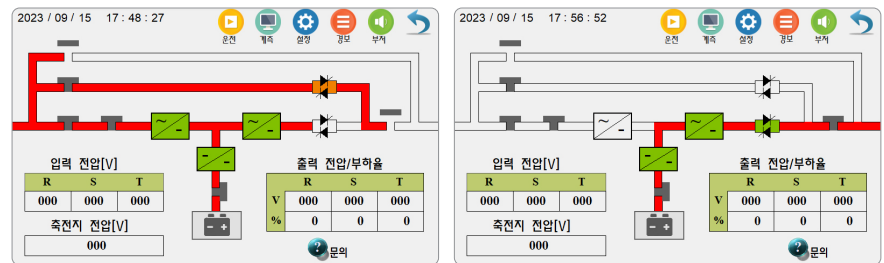


ALL IGBT  
3 Phase input / 3 Phase output  
Transformer-less architecture

### Features

- ON LINE SYSTEM
- SSM high performance of the output voltage characteristics with (Symmetry Switching Method)
- Output voltage FFT (Fast Fourier Transform) analysis for non-linear load to the output voltage waveform distortion (THD-Total Harmonic Distortion) improve
- On a full-featured digital control to environmental changes such as ambient humidity, precise power control
- Additional capacity and reliability features for parallel operation (standby parallel, load-sharing scheme)

### Touch-Screen Display Panel



User Friendly INTERFACE Maximize user convenience with HMI(Human Machine Interface)

### Environment

Item	Environment	
Rated Input Voltage	Input 3Φ 380/220V Input voltage range ±10%	Output 1Φ 220V
Frequency	Input 50Hz, 60Hz ±5%	Output 60Hz ±0.5%
Installation Site	Altitude 1000m (Indoor)	
Relative Humidity	Max 95 % (Non-Condensing)	
Temperature	Operation : 0°C ~ 40°C	Storage : -15°C ~ 50°C

## Efficiency & Dimension

Item		Capacity (KVA)																	
		10	15	20	30	40	50	60	70	100	120	150	200	250	300	400	500		
Efficiency	1 $\Phi$	82	82	82	84	84	84	87	87	87	88	90	90	90	91	93	95		
Noise (dB)		Below 65									Below 75								
Dimension	Width	670			770		800		1080		1400		2200		2600		2800		3400
	Depth	790			790		800		850		1000		1000		1000		1000		1000
	Height	1520			1600		1800		1800		2000		2000		2000		2000		2000

## Standard Specifications

General Characteristics	Cooling Method	wind force-cooled Method base on temperature sensing
	Rated Working	100% Continuout (125% 10min / 150% 1min )
	Rectification	Space Vector PWM Control [IGBT] using high speed DSP
	Inverter Control Method	PWM control [IGBT] base on analysis FFT
	BYPASS Method	3 phase SCR Switch
Electrical Properties	Inrush Current Limiting	Limited by Soft Start
	Voltage Stability	Static Condition : Below $\pm 1\%$ Dynamic Condition : Below 5% (When Load changing Condition : 0% - 100% 0%)
	Transfer Time	Within 4ms
	Output Voltage Control	$\pm 5\%$
	THD	Input : within Currency 5% / Voltage 2%
		Output : - Balanced Load: less than 2% - 100% unbalanced load: less than 3% - Non-linear load (KS standard based)
	Power Factor	Input : over 0.99
Output frequency stability	Free-Running : Rated frequency $\pm 0.5\%$	
Battery	12V 30 Cells	