### เครื่องสำรองไฟฟ้าแบบ TRUE ON-LINE

#### **VENUS SMART DSP TRUE ON-LINE DOUBLE CONVERSION UPS** 5-20KVA

# ENUS SMART

#### TRUE ON-LINE UPS **Double Conversion Technology**



#### **Features**

- True On-line Double Conversion UPS
- · Advance DSP Control Technology
- Power Factor Correction (PFC) Design PF >0.99
- · Wide Range of Input and Frequency
- · Output Power Factor 0.8
- · Zero Transfer Time
- · Output Voltage 220V ±1%
- N+X Parallel Redundancy Function
- True Sine Wave Output with Less than 3%(THD)
- · Self-Diagnosis at UPS Start-up
- · Advanced Battery Management (ABM)
- · Lightning and Surge Protection
- · Short Circuit and Overload Protection
- · Fan Speed Automatically Changes as Load Varies
- · External Battery Bank (Optional)
- · Economy Mode (ECO)
- · Fully Screen LCD Display
- · EMI/RFI Noise Filter
- · Manual Bypass for Service Maintenance
- RS232 Communication with UPSilon Monitoring/ RS485, USB (Optional)
- · SNMP Card/ IP POWER SE Network (Optional)
- TIS 1291-2545/ CE IEC62040
- ISO 9001-2008 Certified Manufacturer

#### **Online High Frequency Design**

Adopting the design of smart-wide of high frequency online, It blocking abnormal power to the load impact effectively, and ensuring the stability and reliable of output power, to make the load running safely.

#### **Advance DSP Control Technology**

The advance DSP digital control technology enable UPS more stable performance and with better quality.

#### Active Input Power Factor Correction(PFC)

Digitalized control of the PFC enable the UPS to keep the Input power factor above 0.99 to prevent possible electric grid pollution and meanwhile mostly save the cost.

#### Widened Range of Input Voltage and Frequency

We intentionally widen the range of input factors to make sure the UPS can apply to various environment, which will Effectively sustain the battery charging even in unstable power environment so that the service life of the UPS could be obviously prolonged.

#### **Adaptive Load Management**

This technology allows the UPS to be set up at a fixed 50Hz or 60Hz output while it also can intelligently monitor power usage and automatically sheds and reconnects loads in order to prevent generator overload.

#### Support the Generator

The wide range of input voltage and frequency can effectively separate the harmful electric wave produces the generators and provide safe and reliable power supply.

#### High- Reliability Parallel Redundancy Technology

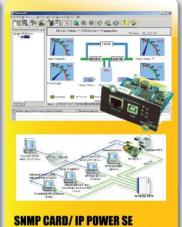
N+X parallel redundant technology means that there is a UPS unit providing protection for the key loads. When any one of the system was failure, the UPS could provide the high quality power to the key loads due to the additional one, which makes the system more reliable.

#### Sufficient Expansion Slots

The pre-allocated smart slots enable flexibility in choice of USB cards, AS400 cards, CMC monitoring cards, SNMP cards, RS485 and EMD environment monitoring cards.

















# **VENUS SMART**

## CHUPHOTIC

### TRUE ON-LINE UPS

Model		VNS5K	VNS6K	VNS8K	VNS10K	VNS10KT	VNS12KT	VNS15KT	VNS20KT
Power Rating	PF= 0.8 KVA	5KVA	6KVA	8KVA	10KVA	10KVA	12KVA	15KVA	20KVA
	KW	4KW	4.8KW	6.4KW	8KW	8KW	9.6KW	12KW	16KW
Control Technology		DSP Control High frequency and Double Conversion Online IGBT with Advance Power Factor Correction (PFC) Technology							
INPUT								0,	
Phase		1 Phase 2wire+PE				3 Phase 4wire+PE			
Voltage Range		220VAC +/-25%(176-276Vac)				304-478Vac			
Frequency					46-54 Hz(/	Adjustable)			
Input Power factor			> (	).99			> 0	.95	
OUTPUT					N2.112.00				
Phase		1 Phase 2wire+PE							
Voltage		220V±1%							
Frequency		50Hz ±1%							
Efficiency Total Harmonic Distortion		>90% True Sine wave, <2% (Linear Load) , <5% (Non-Linear Load)							
Transfer Time			True	Sine wave,		r Load) , <5°	% (Non-Line	ar Load)	
BATTERY					"	ms			
Туре		Sealed lead acid maintenance free							
Number of Batteries		12V/7.5Ah x 16							
Battery Voltage		192Vdc				192Vdc			
Charging Time		90% capacity after 5 hrs.							
Special Backup Time		Specified by customer (External battery)							
INDICATOR									
LED display				Input	, Inverter, By	pass and B	attery		
LCD display		Operate mode, Input, Output, Frequency, Bypass, Battery, Load, VA, Watt, Charger, Temperature and Fault Status							
Audible Alarm		Line failure: beep one every 4s, Battery low and Fan fail: beep once every 1s, L-N-G warning: Beep once every 2 min., Overload: Beep 0.5s, Bypass: Beep once/ 2 min., Over temperature and Fault: Beep continuous							
COMMUNICATION IN	ITERFACE			,,					
Intelligent Port		RS232 /USB and SNMP (Optional)							
STANDARD									
Safety		EN62040-1-1							
EMC		EN50091-2,EN61000-4-5, EN61000-3-2/-3							
Manufacture		ISO9001, CE							
European Directive		CE marked compliance LVD/EMC							
ENVIRONMENT									
Temperature		0 °C - 40 °C							
Humidity		0-95 % (non-condensing)							
Audible Noise					<45dB a	at 1meter			
PHYSICAL									
Dimension (WxDxH) mm					260x5	70x717			
Weight (kg)		90	90	93	93	55	55	55	55

<sup>·</sup> All specification are subject to change without prior notice.

EW. Venus-Smart 5-20K BRC Rev. 1.00/2011

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