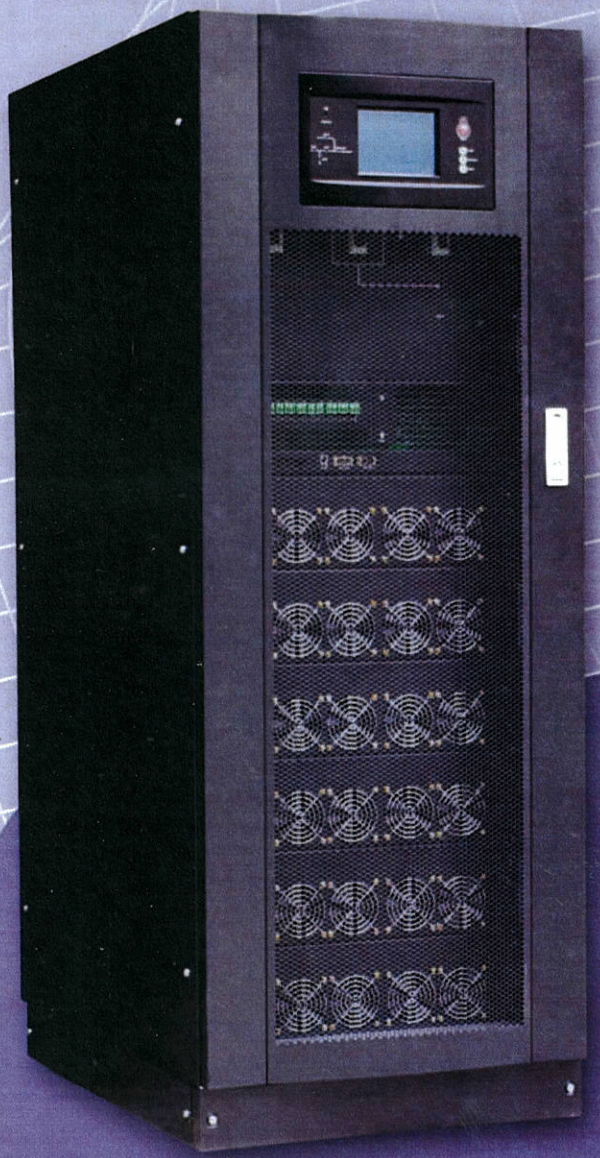
MODULAR
UPS SERIES

20 KVA - 400 KVA Advanced Modular Design and Redundant Power System

- **Modular Construction Design**
  Each power module hot swappable
- **Easy Operation and Installation**
  Flexibility to install reducing installaion time
- **Intelligent Battery Management**
- **Intelligent Protection System**



The Modular UPS Series, is a modular and online double conversion UPS for sensitive equipment. The power rating covers the range from 20 KVA to 400 KVA which delivers the best combination of reliability, functionality, hot-swappable and flexibility at a competitive price. It is designed specifically for data centers, critical equipment and computer systems.

The Modular UPS Series combines the latest IGBT three level technology together with DSP control arithmetic. Combined with high input power factor, low THDi and high system efficiency, this achieves very high load adaptability for multiple varying applications. The modular design ensures reliable, trouble free operation. Power expansion is easy by adding modules to the system up to 200 KVA in a single frame. It is possible to connect two frames in order to reach the maximum level of 400 KVA.

Options include

- SNMP communication card
- Battery cold start module
- BCB box for battery
- Lightening protection module
- Alarm and message module for mobile phone
- Touch screen technology
- Bypass and monitoring module

Specifications

Model	MODULAR UPS SERIES		
CAPACITY	VA/W	20 KVA - 400 KVA	
INPUT	Input Voltage	380V / 400V / 415 V (line to line)	
		220/230V/240V (line to neutral)	
	Input Frequency	50 / 60Hz ± 5% (Auto Sensing)	
	Power Factor	>0.99	
	Input Voltage Window	-40% ~ +25%	
	Frequency Window	40 Hz / 70 Hz ± 0.2%	
BATTERY	Battery Voltage	± 240 VDC	
	Charge Power	20% Available Power Modules	
	Charger Voltage Precision	1%	
BYPASS	Bypass Voltage	380 V / 400V / 415V, three phase	
		220V / 230V / 240V, one phase	
	Bypass Voltage Window	-20% - +15% full load	
	Bypass Overload Capability	125% long time operation	
		125%<load<130% more than 1 hour	
		130%<load<150%, more than 6 minutes	
		>1000%, more than 100ms	
OUTPUT	Output Voltage	380 V / 400V / 415V, three phase	
		220V / 230V / 240V, one phase	
	Voltage Precision	1% (balance Load), 1.5% (unbalanced load)	
	Voltage THD (Total Harmonic Distortion)	THD <1% (linear load), THD <5% (non linear load)	
	Power Factor	0.8	
	Phase Tolerance	120V ±0.5% (balanced and unbalanced load)	
	Crest Factor	3:1	
	Overload Capability	110% transfer to bypass after 1 hour	
		125% transfer to bypass after 10 minutes	
		150% transfer to bypass after 1 minute	
		>150% transfer to bypass after 200 ms	
SYSTEM	Efficiency	Normal mode 95%, ECO mode 99%	
	Battery Mode Efficiency	95%	
	Display	LCD and LED touch screen and keyboard	
	IP Class	IP20	
	Interface (Communication Ports)	RS232, RS485, Dry Contacts, SNMP card, EPO, Generator Interface	
	Installation Connection	Top or bottom cable connection	
	Operation Temperature	0°C - 40°C	
	Storage Temperature	-25°C - 70°C	
	Relative Humidity	0 - 95% (non-condensing)	
	Noise (dB)	<55dB	
	Weight	6 Module Cabinet	150kg
		10 Module Cabinet	180kg
		20KVA Module	22kg
	Dimensions (WxDxH)(mm)	6 Module Cabinet	600 x 900 x 1600
		10 Module Cabinet	600 x 900 x 2000
		Module	440 x 600 x 134 (20KVA)

APPLICABLE STANDARDS

This product complies with CE 73/23 & 93/68 (low voltage safety) and 89/336 (EMC) and EMC standards of Australia and New Zealand (C-Tick) and the following UPS product standards:
*IEC62040-1-1 General and safety requirements for use in operator access area
*IEC/EN62040-2 EMC requirements CLASS C3
*IEC62040-3 Performance requirements and test methods