



Experience



Innovative Power Solution

# APWM IGBT Based Online UPS System 1KVA - 100KVA

## Home UPS



300 VA - 3000 VA

## Servo Controlled Voltage Stabilizer



1KVA - 1000KVA



## HF Series Online UPS



1 KVA - 10 KVA

**A&D Waves Technologies**  
**Chennai - 600 016.**

## FEATURES

- ❖ True ON-LINE UPS topology
- ❖ High frequency PWM design
- ❖ IGBT based digital inverter
- ❖ Wide input range
- ❖ Programmable power walk-in
- ❖ Spikes, RFI,EMI protected
- ❖ Extended battery backup
- ❖ Reduced filter losses
- ❖ Constant voltage and frequency
- ❖ High efficiency
- ❖ RS 232 COM port(optional)
- ❖ Proven performance
- ❖ Reliability, safety and security
- ❖ Small foot print

## OTHER PRODUCTS

- ❖ Battery charges
- ❖ Domestic inverters
- ❖ Automatic power factor controllers UPTO 500 HP
- ❖ Servo controlled voltage stabilizers UPTO 1000 kVA
- ❖ Line interactive UPS

## OPTIONAL FEATURES

- ❖ 3 Phase Output
- ❖ Parallel Redundant I Hot Standby
- ❖ Dual Redundant Parallel Load Sharing
- ❖ Multiple Redundant Load Sharing UPS System
- ❖ Static By-Pass Switch for Automatic Load Transfer
- ❖ Remote Indicating Panel
- ❖ Isolation Transformer & Servo Stablizer on By-Pass Line
- ❖ Additional Indications and Alarms
- ❖ Colour

Manufactured by :

**A&D Waves Technologies**

#7/11A, Viswanathar koil street, St.Thomas Mount,  
Chennai-16. Ph No : 64580012, 43519129 ,  
Mobile : 94441 40443 / 98411 62298  
E-mail : waves\_ups@yahoo. com

## TECHNICAL SPECIFICATIONS

### CONVERTER

Technology	switch mode rectifiers / phase controlled rectifiers
Primary source voltage	230V AC 1 phase 440V AC 3 phase( $\pm 15\%$ to 30%)
Output characteristics	DC-constant voltage, constant current
Power device	IGBTs / SCRs
Protection	Advanced electronic protection for device safety backed up with MCBs / MCCBs and fast acting Fuses. Soft start for 0-20 sec power walk-in.
Input power factor	>0.95 with harmonic suppression

### INVERTER

Techonology	1 KVA-100KVA:Digital PWM IGBT design
DC volts	VDC (120 to 192) 1 phase (300 to 384) 3 phase
Output voltage	230V~AC 1 phase / 440~AC 3 phase( $\pm 1\%$ )
Output frequency	50 Hz( $\pm 0.1\%$ )
Output wave form	Sinusoidal
Switching frequency	12-24 KHz
Transient response	For 100% step load, output changes $< \pm 5\%$ and Recovers to normal within 20 milliseconds
Efficiency	85-92%
Crest factor	3:1
Overload	150% for 1 min., 125% for 10 min
Power factor	0.8-unity
Power device	IGBT (insulated gate bipolar transistor) / MOSFET
Protection	Advanced electronic protection for device safety Backed up with MCBs / MCCBs and fast acting Fuses. High speed pulse balancing electronic Overvoltage/undervoltage protection Trip reset

### GENERAL

Back-up	DC source-SMF / lead acid / Ni- Cd Backup time 15 Min . to 8 Hours
Indications	Main ON, DC ON, output ON, Converter fault, Low DC, Inverter Trip, O/P High, O/P Low, Bypas Mode With Network Interface Options
Metering	DC Volts, DC current(charge / discharge), AC Output volts, AC Load Current & Output Frequency (other functions-optional)
Ambient Temperature	0-45 $^{\circ}$ c
Relative Humidity	0-95% non-condensing
Cooling	Forced Air

Dealer :