



**Inbuilt  
Isolation TX  
DSP & Input PFC  
Low Input THDi**

# AURO-31 Series 10 ~ 50 kva

**AURO- 31 Series Online UPS Systems combines a comprehensive set of features which are most essential for critical applications in sectors, such as, Health, IT & ITES, Manufacturing, Printing, Textile, Hospitality etc...**

### DSP Design

Most electronic loads served by UPS systems are non-linear and thus generate harmonic currents that must be filtered at the inverter output to reduce the distortion to acceptable levels. The DSP controlled UPS systems employ software controlled harmonic conditioners with the ability to dynamically adopt to changing load conditions for compensating load harmonics without manual intervention.

### PWM IGBT Rectifier & Inverter

The PWM IGBT - rectifier design regulates the input current to near Unity Power Factor, and corrects distortion at the input current wave-form to within 5 to 8%. This helps in cleaner electrical upstream environment, and also needs lower capacity breakers, cables, and, almost equivalent capacity DG set.

### Inbuilt Galvanic Isolation

Provides electrical Isolation, integrated fault management, offers high reliability, which is essential in today's polluted electrical system. It provides local points for neutral to earth bonding, and also reduction in common-mode noise level. Most importantly, it aids in additional impedance in fault-correction, and arc-flash reduction, and, also improving over-current protective devices by reducing fault-current path resistance.

### Works at even high temperature environment

The AURO33 series is designed & built-with high quality & higher rated components - so that the UPS can work continuously even at 50 deg Centigrade, without any de-rating of the capacity.

### Useful Combination

- \* DSP based
- \* PWM IGBT
- \* inbuilt Isolation
- \* input THDi < 4.5 %
- \* 0 ~ 50 deg C operation
- \* Additional filters
- \* (PRS) Parallel operation



### application segments

personal    telecom    medical    diagnostics    research    labs    factories    cnc    machinery  
datacenters    computers





## AURO -31 Series 10 – 50 kVA Technical Specifications (3 ph input / 1 ph output)

Specifications	3 phase input 1 phase output	
Capacity Rating (kVA)	7.5 / 10 / 20 / 30 / 40 / 50 kVA	
Technology	<b>DSP controlled</b>	
Input Parameters		
Rectifier	<b>PWM IGBT Rectifier</b>	
Input Voltage Window	415 ( -20% to +15%)VAC,3 ph. + N + E	
Input Frequency	50 Hz +/- 10 %	
THD i	< 4.5 %	
Output Parameters		
Inverter Technology	<b>PWM IGBT Inverter / SCR</b>	
Overall Efficiency	<b>&gt; 90 %</b>	
Output Voltage	400/415 V AC +/- 1 %	
Output Frequency	50 Hz +/- 0.1 %	
THD v	Linear Load < 2 %, Non linear load < 5 %	
Crest Factor	3 : 1	
Overload	120%,for 10 min & 150% for 1 min.	
Isolation	<b>Galvanic Isolation Transformer at the inverter output as standard</b>	
Bypass	Manual & Auto mode	
Protections	Battery Low, O/P Over voltage, Short circuit, Spike, Surge arrestor, RFI / EMI Filter	
Indications	LED : Mains ON, Inverter ON, UPS ON, Battery, Battery LOW Inverter Trip, O/P Overload	
Display	LCD Graphic Display Multiline to measure: I/P, O/P & DC Voltage, Load %, Frequency, Battery Health	
Battery Parameters		
Battery	192 / 240 VDC 7.5 kVA – 15 kVA	360-600 VDC ( from 15 kVA to 50 kVA)
Battery Type	Tubular/ SMF/VRLA	
Charger Type	Boost Charger – with Advanced battery health management	
Communication	RS 232 Serial / SNMP (optional)	
Noise Level	< 60-70 dB	
Operating Temperature	<b>0 – 50 deg Centigrade</b>	
Standards	IEC 62040 PART III	