

ER SERIES

(Energy Efficient and Reliable Series)
10KVA ~30KVA (3:1)

Advanced DSP ---- digital control technology

The inverter control, phase synchronous, I/P rectify control, logic control systems all take advantage of the DSP technology so that the UPS has the following features: high precision, high speed: simplified control circuit and high reliability

High input power factor -----green and energy-saving power

The I/P power factor is above 0.99. Input current THDI<5% which greatly reduces the harmonic pollution of the AC network, and at the meantime, the efficiency of the usage of the utility is improved, and the installation cost and the noise is reduced. The speed of the fan can be auto-adjustable as well: all these make the UPS green energy-saving power.

Wide input voltage and frequency range

With the wide input voltage and frequency range, it reduces the frequency of battery discharges so that the battery life can be prolonged and in the meantime, it is convenient to connect the oil generator.

Reliable parallel technology

It adopts the most advanced parallel control technology and digital equal flow control technology to make the Ups high compatible and have the choice of N+1 parallel and redundancy and share battery sets.

Standard Matching Output Isolating Transformer

Prevent equipment from danger of UPS output voltage DC ponderance: Effectively reduce the output zero to earth voltage, and meet some special requirement for the zero to earth voltage: Effectively reduce the direct interference of the load harmonic current against UPS, and improve the inverter reliability: Industrial level UPS, which adapt to industrial production ect situation, apply to larger situation.

Flexible network monitoring and management

The UPS is available with RS 232, RS 485 (optional), SNMP (Optional), dry contact (optional) etc., it can support TCP/IP protocol with remote control. The network monitoring and management enables the UPS to have the function of self-diagnosis, timely sending the demanding instruction, email, automatically saving the files and turning off the UPS etc.

Perfect protection

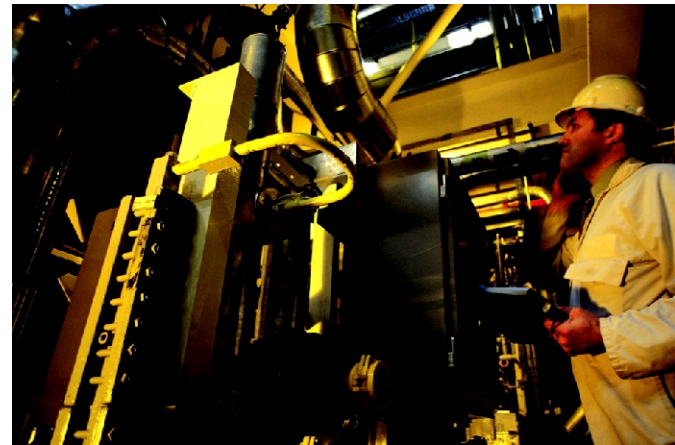
The UPS has I/P & O/P over-protection, short voltage protection, Overload protection, short-circuit protection, over-heat protection, surge protection etc to make sure the UPS can work in different environment.

Cold start and AC start function

When AC fails UPS can be started by battery directly; In AC mode, UPS can be started by AC directly without battery; when the battery discharges and there is low voltage protection, after AC returns, the UPS can start up automatically

Easy maintenance design

Large LCD display in both Chinese and English, manual by pass design, failure information enquiry orientation all is convenient for user and in the meantime, improving the usability and maintainability of the system.



AVO MASTER POWER ONLINE UPS TMP 3000

Application:

Computer/critical servers/data center/
hub & other network device/LAN/WAN.



Technical Specifications

Model	TMP3010	TMP3015	TMP3020	TMP3030
Rated capacity	10KVA	15KVA	20KVA	30KVA
Working principle	Online, static bypass switch (Uninterruptible transfer), dual conversion			
Phase	Three phase in single phase out			
INPUT				
I/P Power factor	>0.95			
Rated voltage	380/400/415V AC			
I/P voltage range	210-280V AC (Half load), 280-485V AC (Full load)			
Rated frequency	50Hz/60Hz			
I/P frequency range	40-70Hz			
Bypass I/P voltage range	±15%			
THDI	<5%			
CHARGE				
Float charge	220VDC			
Charge current	6-24(extendable)			
Protection	Charge voltage, over current protection, short circuit protection			
BATTERY				
Model	Lead acid maintenance free battery			
Battery quality	16 pcs 12V battery connection			
Rated battery voltage	192 VDC			
AC OUTPUT				
Power factor	0.8 (lag)			
Phase	L+N+G			
Rated voltage	200/208/220/230/240VAC			
Rated frequency	50Hz/60Hz			
Frequency distortion	< ± 0.1Hz (battery mode)			
Voltage distortion	< ± 2% (static)			
O/P current crest factor	3:1			
Wave distortion	Liner load<3%; unlinear load<5%			
Dynamic load voltage instant distortion	Liner load< ± 5% (from 0-50%-100%)			
Dynamic response recover time	< 40ms			
Overload capacity	105%-125% 10min : 125%-150% 1min> 150% 1S			
ALARM				
AC abnormal	Intermission 4S, beep 15: 1 min auto alarm eliminate			
Battery low voltage	Intermission 1S, continuous beep 1S.			
Overload	Intermission 4S, continuous beep 2S			
Failure	Continuous beep			
SYSTEM				
Protection	O/P shortcut, overload, O/P over/low voltage, battery low voltage, over temp protection			
Efficiency	100% linear > 89%			
Communication interface	ES 232 USB (Standard) : RS 485, SNMP (Optional)			
Operate Temp	0~ 40°C			
Relative humidity	0~ 90% (non-condensing)			
Noise dB	<60 (£ 1M)			
Sure protection	IEC60664-1			
Electromagnetism capability	GB7260.2-2003			
Weight Kg	70	105	130	
Dimension (WxHxD) mm	260x700x545	280x720x600	320x900x670	

● All specifications are subject to change without prior notice ● Custom-made specifications are acceptable



SWITCHING AVO ELECTRO POWER LIMITED

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