

# KS-Efficient

## BEETA Series Online UPS (3:1 Phase)



**10KVA-20KVA**

### Application:

Server and other networking equipment

### Features:

1. Three phase in, one phase out
2. High frequency and double conversion on-line technology
3. Fully digitized microprocessor control
4. Wide input voltage range
5. LCD display
6. Cold start
7. Parallel capacity
8. Advanced battery management
9. Lightning and surge protection
10. Short circuit and overload protection
11. Smart RS232 communication with monitoring software
12. Optional SNMP Card slot

### Control Panel



1. LCD
2. ON/OFF Button
3. Self-test/Silence Button
4. Scroll Button
5. Normal
6. Alarm
7. Abnormal

Model Capacity	EFTS10240L 10KVA	EFTS15240L 15KVA	EFTS20240L 20KVA
Input	Voltage Range	400V±20%	
	Frequency Range	50Hz±5Hz	
	Phase	Three phase	
	Power factor	>0.95	
Output	Voltage Range	220Vac±1%	
	Phase	Single phase	
	Frequency Range	Synchronized with utility on AC mode; 50Hz±0.2% on Battery mode	
	THD (linear load)	<2%	
	THD (non-linear load)	<6%	
	Overload Capability	105%~130%, 10min turn to bypass mode; >130%, 1s turn to bypass mode	
	Crest Factor	3:1 (max)	
	Short Circuit Protection	5 cycles turn off inverter, no transfer to bypass, provide alarm (AC mode) 5 cycles turn off inverter, provide alarm (battery mode) input fuse blow or breaker action (bypass mode)	
	Waveform	pure sine wave	
	Transfer Time	0ms (Between AC Mode and Battery Mode)	
Battery	Efficiency	>88%	
	DC Voltage	240VDC	
	Charge Current	10% of the battery capacity	
	Recharge Time	90% capacity after 8hrs charging	
Communication Interface	RS232 ; SNMP (optional)		
Parallel port	Parallel availability for redundancy and load sharing up to three units		
LCD Indication	1. Input voltage/frequency, battery voltage, output voltage/frequency, load watt/VA and percent, inverter temperature 2. Operation mode such as "on line", "on batt", or "or bypass"		
LED Indication	1. Green LED for normal operation, 2. Yellow LED for warning condition, 3. Red LED for abnormal operation		
Noise Level	<55dB		
Environment	Temperature	0~40°C	
	Humidity	0%~95% (non-condensing)	
	Altitude	<1500m	
	Storage Temperature	40~50°C	
Other	Standard Unit Net/Gross Weight	39/51Kg	60/74Kg
	Dimension (WxDxH)mm	260x570x717	320x620x950
	Packing (WxDxH)mm	430x700x845	410x717x1050

\*since upgradation is a continuous process,specification & features are subject to change without prior notice  
\*\* All specification can be reconfigure according to the user demand with the consent of R&D

# KS-Efficient

## Series Online UPS (1:1 Phase)



**1KVA-10KVA**

### Application:

Small IT network, servers and other IT equipment.

### Features:

1. High frequency and double conversion online technology
2. Fully digitized microprocessor control
3. Wide input voltage range
4. LCD display
5. UPS start up without battery
6. Cold start
7. Advanced battery management
8. Lightning and surge protection
9. Shot circuit and overload protection
10. Network/fax/modem surge kprotection
11. Smart RS232 communication with monitoring software
12. Optional SNMP card slot

	EFSS1K24L 1KVA/700W	EFSS1K36L 2KVA/1400W	EFSS2K48L 3KVA/2100W	EFSS3K72L 6KVA/4.2KW	EFSS3K96L 10KVA/7KW
Voltage Range	When load<60%, input range is 115±5VAC-295±5VAC When load>60%, input range is 160±5VAC-295±5VAC				176V-276VAC±5V
Frequency Range	50Hz±5Hz				
Phase	Single phase				
Power Factor	>0.97				
Voltage Range	220/230Vac±2%				
Frequency Range	Synchronized with the utility on AC mode; 50Hz±0.2% on Battery mode				
THD (linear load)	<3%				
THD (non-linear load)	<6%				
Overload Capability	>110%, 30s turn to bypass mode;>150%, 200ms turn to bypass mode				
Crest Factor	3:1 (max)				
Short Circuit Protection	5 cycles turn off inverter, no transfer to bypass, provide alarm (AC mode) 5 cycles turn off inverter, provide alarm (battery mode) input fuse blow or breaker action (bypass mode)				
Waveform	Pure Sine Wave				
Transfer Time	Between AC Mode and Battery Mode : 0ms Between AC Mode and Bypass Mode 4ms (typical value 2.5ms)				
Efficiency	>83%				
BATTERY					
Model	12V sealed lead acid maintenance free				
DC Voltage	24VDC	36VDC	48VDC	96VDC	72VDC
Charging Technology	SMPS Based				
Charge Current	7A				
Recharge Time	90% capacity after 8hrs charging				
INDICATION & COMMUNICATION					
Communication Interface	RS232 ; SNMP (optional)				
LCD	1. Input voltage/frequency, battery voltage, output voltage/frequency, load watt/VA and percent, inverter temperature 2. Operation mode such as "on line", "on batt", or "or bypass"				
LED	1. Green LED for normal operation, 2. Yellow LED for warning condition 3. Red LED for abnormal operation				
ENVIRONMENT					
Noise Level	<55dB				
Temperature	0~40°C				
Humidity	0%~95% (non-condensing)				
Altitude	<1500m				
Storage Temperature	25~55°C				
MECHANICALS					
Standard Unit Net/Gross Weight	8/10Kg	8/10Kg	14/16Kg	14/16Kg	15/17Kg
Dimension (WxDxH)mm	144x419x215	144x419x215	191x478x339	191x478x339	191x478x339
Packing (WxDxH)mm	258x524x334	258x524x334	332x603x482	332x603x482	332x603x482

\*since upgradation is a continuous process,specification & features are subject to change without prior notice  
\*\* All specification can be reconfigure according to the user demand with the consent of R&D

# Infinity Gamma

## Series Online UPS (3:3 Phase)

Advanced 3 Phase Power Protection for Small-Medium Server Rooms, Data Centers, Industrial, Telecom and other mission-critical Applications

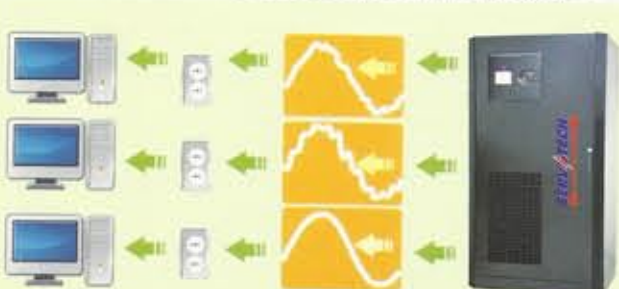
**10-300 kVA**



### GENERAL FEATURES

- True On Line - Double Conversion Technology
- Latest Technology Floating Point (DSP) Controllers
- IGBT PWM Rectifier & Inverter Technology
- Advanced battery management
- 2500 event log with detailed parameters record
- Static & manual bypass operation
- Easy and free power upgrade
- Multi lingual LCD panel
- Overload and short circuit protection
- Advanced Communication Capabilities
- Perfect Generator compatibility
- Customizable as frequency converter
- Cold Start function
- Auto Restart function
- Emergency Power Off

### DSP Power Factor Corrected IGBT Rectifier



### Digital Control System



### Advanced User Interface



### Parallel Operation Features

