

CLIPPERS SERIES



High-Level Online UPS

6KVA / 10KVA

Applications:



Data Center



Telecom



Networking



Computer

Professional On-Line UPS Solutions

Ideal for medium-density power protection demand, power guardian, FSP Clippers series provides Rack/Tower to fit diverse environment. Clippers 6K/10K are designed as long time model which brings flexibility to attach with various capacities of external battery banks. The LCD display panel can be easily shifted by pressing buttons to suit the installation format, vertical stand or horizontal rack mount. Besides, IT personnel can manage equipment well from learning intuitive information via LCD display

GENERAL FEATURES

- True double-conversion
- Output power factor=1
- Output voltage regulation < 1%
- Higher output crest ratio 3:1
- 50Hz/60Hz frequency converter mode
- Emergency power off function (EPO)
- ECO mode for energy saving
- Full time over voltage cut-off and surge protection
- High power factor charger with low ripple current
- Low input THDi to reduce power system pollution
- Adjustable charging current via LCD panel
- Smart battery charger design to optimize battery performance
- Generator compatible

True double-conversion online UPS

A true double conversion UPS will rectify input power to offer clean, pure, high level quality power with $\pm 1\%$ voltage output regulation to fully protect mission-critical devices such as sensitive networks, small computer centers servers, telecom applications, as well as for industrial applications.

Output power factor 1.0

Clippers series is a high-density UPS with output power factor 1.0 to provide higher performance and efficiency to critical applications.

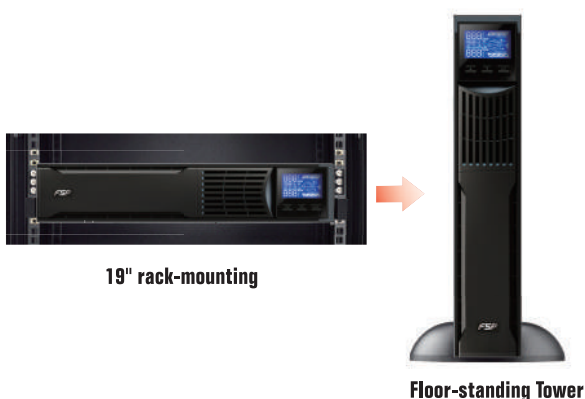
User-friendly and easy-shift LCD display

The front panel digital display can be easily shifted through LCD setting to suit the installation format, vertically stand or flat wall mount.



Rack / Tower design

Clippers series is designed in true universal-mount case. It can be easily installed as floor-standing tower or in 19-inch rackmount bracket.



50/60 Hz frequency converter mode

Lock output frequency at 50Hz or 60Hz to suit power sensitive equipments.

ECO and advanced ECO mode for energy saving

Thanks FSP Clipsper series smart design, operation efficiency up to 97% ECO mode implemented. Furthermore, Clipsper even offers advanced ECO mode to allow UPS to operate at higher efficiency up to 98% for more energy saving.

In these operation modes, load is supplied by the utility. When utility failure, UPS inverter will assume control the load and provide clean power continuity to the connected devices.



Emergency Power Off function (EPO)

The safety function can guarantee & secure the emergency responders, fire fighters not exposed to dangerous voltage, electrical hazard from the device. This is important if equipment is emitting smoke, fire, or flood, or if person is being electrocuted.

Intelligent slot for SNMP or Relay Card



Parallel Option N+X for 6K-10K models

Clippers 6K/10K can be parallel operated with up to 3 units to accommodate increases in power demand as well as to attain power redundancy with high system integrity.



TECHNICAL SPECIFICATIONS

MODEL	CLIPPERS RT 6KL	CLIPPERS RT 10KL
PHASE	Single phase with ground	
CAPACITY	6000 VA / 6000 W	10000 VA / 10000 W
INPUT		
Voltage	220/230/240 VAC	
Voltage Range	110-300 VAC ± 3% @ 50% load 176-300 VAC ± 3% @ 100% load	
Frequency Range	46~54 or 56~64 Hz	
Harmonic Distortion(THDi)	< 6% (50% load) < 4% (100% load)	
Power Factor(@100% load)	≥ 0.99 @ nominal voltage	
OUTPUT		
Voltage	220/230/240 VAC	
AC Voltage Regulation (Batt. Mode)	± 1%	
Frequency Range (Synchronized Range)	46~54 Hz or 56~64 Hz	
Frequency Range (Batt. Mode)	50 Hz ± 0.1 Hz or 60Hz ± 0.1 Hz	
Harmonic Distortion	Linear Load	< 1%
	Non-linear load	< 4%
Transfer Time	AC Mode to Batt. Mode	0 ms
	Inverter to Bypass	0 ms
Waveform	Pure sine wave	
EFFICIENCY		
AC Mode@full charged battery	94.5%	
ECO Mode@full charged battery	98.5%	
Battery Mode	92.0%	
BATTERY		
Battery Type	depend on application	
Numbers	16 ~ 20	16 ~ 20
Charging Voltage(Vdc ± 1%)	218.4~273	218.4~273
Charging Current(Default 2A)	4 A	
PHYSICAL		
Dimension, D x W x H (mm)	610 x 438 x 88	
Net Weight (without battery kgs)	17	20
Net Weight (with battery kgs)	17	20
Communication Interface	RS232 & USB	
OPERATING ENVIRONMENT		
Humidity(non-condensing)	20-95 % RH @ 0- 40°C	
Noise Level (@ 1 Meter)	≤ 55 dBA	≤ 58 dBA
Altitude(Max 3000m)	10% de-rating for over 1000m	
OPERATING ENVIRONMENT		
Smart RS-232/USB	Supports Windows® 2000/2003/XP/Vista/2008/7/8/10, Linux and MAC	
SNMP(Optional)	Power management from SNMP manager and web browser	
STANDARD		
EMC/safety	EMC EN62040-2 C2 for CE models	

* Product specifications are subject to change without further notice

Backup Time Table for Clippers Series

Battery Bank	Backup Time with Load (Min)				
	25%	50%	75%	100%	
CLIPPERS RT 6KL	+1 BB-240/9RT (20 x 9AH Batteries)	43.0	20.0	12.9	8.0
	+2 BB-240/9RT (40 x 9AH Batteries)	99.0	46.0	31.7	22.7
	+3 BB-240/9RT (60 x 9AH Batteries)	150.0	71.0	43.5	30.4
CLIPPERS RT 10KL	+1 BB-240/9RT (20 x 9AH Batteries)	22.0	9.0	6.0	3.0
	+2 BB-240/9RT (40 x 9AH Batteries)	54.0	23.0	16.9	12.0
	+3 BB-240/9RT (60 x 9AH Batteries)	88.0	38.0	23.0	16.0

