

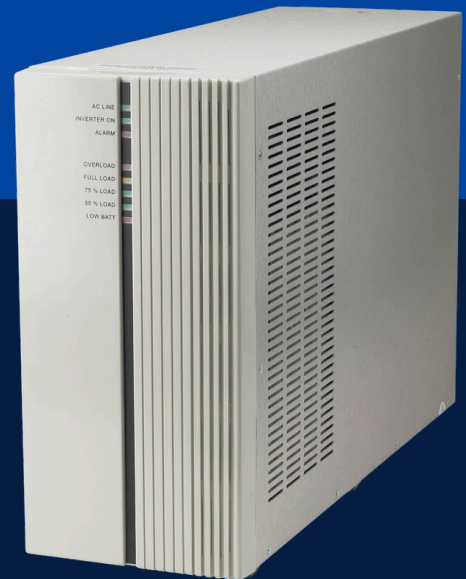
ED UPS VOLTAGE & FREQUENCY CONVERTERS TOWER DATASHEET

Overview

The Falcon® Electric ED Series Rackmount UPS and Frequency Converter delivers clean, tightly regulated AC power from 47Hz–450Hz input, ensuring reliable performance and protection for demanding industrial, military, and laboratory applications.

Key Advantages

- **All-in-One Power Solution:** Combines voltage and frequency conversion, regulation, and true on-line UPS protection to deliver clean, stable AC power.
- **Wide Input & Output Flexibility:** Accepts 47–450Hz input and provides regulated 50Hz or 60Hz output for worldwide compatibility.
- **True On-Line Double Conversion:** Regenerates pure sinewave power, isolating equipment from surges, noise, and voltage fluctuations.
- **Extended Brownout & Surge Protection:** Maintains steady output during severe voltage variations, ensuring continuous equipment operation.
- **Compact, Rugged Design:** Lightweight, industrial-grade construction ideal for demanding applications and limited-space environments.
- **Reliable Global Performance:** Proven for military, aerospace, industrial, and communications systems requiring precision power and maximum uptime.



ED UPS VOLTAGE & FREQUENCY CONVERTERS TOWER

D A T A S H E E T

Model Number	ED-1000-A	ED-1500-A	ED-2000-A	ED-3000-A	ED-4000-A	ED-5000-1
Nominal VA	1000	1500	2000	3000	4000	5000

Electrical Input

AC Voltage, +10% -20%	120Vac					
Current-Amps	10.4	15.6	20.8	29	39	48
Frequency Range	47-450 Hz					

Electrical Output

AC Voltage, $\pm 3\%$	120Vac					
Watts @ 50 or 60 Hz	700	1050	1400	2100	2800	3500
Watts @ 400 Hz	595	892	1190	1900	2600	3200
Current-Amps @ 50/60 Hz	8.3	12.5	16.7	25	33	42
Current-Amps @ 400 Hz	7.1	10.6	14.2	19	26	35
50/60 Hz Non – Linear Repetitive Peak (Amps)	20	30	40	60	80	100
400 Hz Non – Linear Repetitive Peak (Amps)	14.2	21.3	28.3	42.5	56.1	71.8
Total Harmonic Distortion	< 3% @ 100% Linear Load, < 5% @ 100% Non – Linear Load					
Overload	200% for 0.5 Seconds, 120% for 30 Seconds					
Dynamic Response	$\pm 5\%$ RMS for 100% Step Load Change, 1ms Recovery Time					
Output Protection	Short Circuit and Overload					

Electrical Connections

Input	6' Cord with 5-15P	8' Cord with 5-20P	8' Cord with L5-30P	Hardwired
Output	(4) 5-15R	(4) 5-15R	(4) 5-15R	Hardwired

Environmental

Operating Temperature	0° C to 50° C (32° C to 122° F)	0° C to 40° C (32° C to 104° F)
Humidity	10% to 95% Non – Condensing	
Altitude	7,000 Feet	
Cooling	Low Velocity Forced Air Fans	
Audible Noise @ 1.5 Meters	49dBA	54dBA

Controls and Indicators

Sequenced LEDs	Load Level
Single LED	Utility Present, Summary Alarm, Inverter On
Audible Alarms	Utility Interrupt, Inverter Failure, Overload
Communications	Dry Contact Closures on Utility Loss via 9 Pin "D" Connector

Mechanical

Dimensions H x W x D	inches (mm)	13.5 x 6.25 x 19.4 (342.9 x 158.8 x 492.8)					
Weight	lb. (kg)	25 (11.3)	38 (17.2)	38 (17.2)	50 (22.7)	50 (22.7)	60 (27.2)

ED UPS VOLTAGE & FREQUENCY CONVERTERS TOWER

DATASHEET

Model Number	ED-1000- 1/2LC	ED-1500- 1/2LC	ED-2000- 1/2LC	ED2500- 1/2LC	ED-1000- 2/1LC	ED-1500- 2/1LC	ED-2000- 2/1LC	ED-2400- 2/1LC
Nominal VA	1000	1500	2000	2500	1000	1500	2000	2400
Electrical Input								
AC Voltage, +10% -20%	120Vac				230Vac			
Current-Amps	10.4	15.6	20.8	24	5.4	8.1	10.9	12
Frequency Range	47-450 Hz							
Electrical Output								
AC Voltage, ± 3%	230Vac				120ac			
Watts @ 50 or 60 Hz	700	1050	1400	1750	700	1050	1400	1680
Watts @ 400 Hz	N/A				595	892	1190	1487
Current-Amps @ 50/60Hz	4.3	6.5	8.7	10.5	8.3	12.5	16.7	20
Current-Amps @ 400 Hz	N/A				7.1	10.6	14.2	17
50/60 Hz Non – Linear Repetitive Peak (Amps)	8.7	13.0	17.4	25	20	30	40	48
400 Hz Non – Linear Repetitive Peak (Amps)	N/A				14.2	21.3	28.3	33
Total Harmonic Distortion	< 3% @ 100% Linear Load, < 5% @ 100% Non – Linear Load							
Overload	200% for 0.5 Seconds, 120% for 30 Seconds							
Dynamic Response	± 5% RMS for 100% Step Load Change, 1ms Recovery Time							
Output Protection	Short Circuit and Overload							
Electrical Connections								
Input	6' Cord with 5-15P	8' Cord with 5-20P	8' Cord with L5-30P		As Specified			
Output	As Specified				(4) 5-15R			
Environmental								
Operating Temperature	0° C to 50° C (32° F to 122° F)							
Humidity	10% to 95% Non – Condensing							
Altitude	7,000 Feet							
Cooling	Low Velocity Forced Air Fans							
Audible Noise @ 1.5 Meters	54dBA							
Controls and Indicators								
Sequenced LED s	Load Level							
Single LED	Utility Present, Summary Alarm, Inverter On							
Audible Alarms	Utility Interrupt, Inverter Failure, Overload							
Communications	Dry Contact Closures on Utility Loss via 9 Pin "D" Connector							
Mechanical								
Dimensions H x W x D inches (mm)	13.5 x 6.25 x 22.4 (342.9 x 158.8 x 568.9)				13.5 x 6.25 x 19.4 (342.9 x 158.8 x 492.8)			
Weight lb. (kg)	41 (18.6)	64 (29)	68 (31)	41 (18.6)	64 (29)	68 (31)	68 (31)	68 (31)

ED UPS VOLTAGE & FREQUENCY CONVERTERS TOWER

D A T A S H E E T

Model Number	ED-1000-1	ED-1500-1	ED-2000-1	ED-2400-1
Nominal VA	1000	1500	2000	2400
Electrical Input				
AC Voltage, +10% -20%	120Vac			
Current-Amps	10.4	15.6	20.8	22
Frequency Range	47-450 Hz			
Electrical Output				
AC Voltage, ± 3%	120Vac			
Watts @ 50 or 60 Hz	700	1050	1400	1680
Watts @ 400 Hz	595	892	1190	1487
Current-Amps @ 50/60 Hz	8.3	12.5	16.7	20
Current-Amps @ 400 Hz	7.1	10.6	14.2	17
50/60 Hz Non – Linear Repetitive Peak (Amps)	20	30	40	48
400 Hz Non – Linear Repetitive Peak (Amps)	14.2	21.3	28.3	33
Total Harmonic Distortion	< 3% @ 100% Linear Load, < 5% @ 100% Non – Linear Load			
Overload	200% for 0.5 Seconds, 120% for 30 Seconds			
Dynamic Response	± 5% RMS for 100% Step Load Change, 1ms Recovery Time			
Output Protection	Short Circuit and Overload			
Battery				
Type	Sealed Lead Acid Maintenance -Free			
Back Up Time	8 Minutes	5 Minutes	3 Minutes	3 Minutes
@ Full Load	20 Minutes	14 Minutes	9 minutes	9 minutes
@ 1/2 Load				
<small>Battery times are approximate.</small>				
Electrical Connections				
Input	6' Cord with 5-15P	8' Cord with 5-20P	8' Cord with L5-30P	
Output	(4) 5-15R			
Environmental				
Operating Temperature	UL Listed - 0° C to 35° C (32° F to 95° F) Non-UL Listed - 0° C to 50° C (32° F to 122° F) With Hawker High Temperature batteries - 0° C to 60° C (32° F to 140° F)			
Humidity	10% to 95% Non – Condensing			
Altitude	7,000 Feet			
Cooling	Low Velocity Forced Air Fans			
Audible Noise @ 1.5 Meters	54dBA			
Controls and Indicators				
Sequenced LEDs	Load Level			
Single LED	Utility Present, Low Battery, Summary Alarm, Inverter On			
Audible Alarms	Utility Interrupt, Inverter Failure, Overload, Low Battery			
Communications	Dry Contact Closures on Utility Loss & Low Battery via 9 Pin "D" Connector			
Mechanical				
Dimensions H x W x D inches (mm)	13.5 x 6.25 x 19.4		(342.9 x 158.8 x 492.8)	
Weight lb . (kg)	41 (18.6)	64 (29)		