

Eaton FERRUPS FE Series 50 Hz



Eaton® FERRUPS® uninterruptible power systems (UPSs) furnish unmatched reliability in configurable power protection for computers and telecommunications equipment. Patented ferroresonant technology delivers "bulletproof" power protection, overcoming spikes, sags, surges, noise, and lightning. Eaton's exclusive SineSense provides clean, reliable power while conserving batteries during blackouts.

Extensive configurability options make FERRUPS the ideal power protection solution with a wide range of voltages, frequencies, runtimes, power cords, and receptacles. FERRUPS prevents the backfeed of harmonic currents into building wiring which can disrupt computer operations.

Redundant power paths assure high fault-tolerance and optimum uptime. Galvanic isolation separates input from output, filtering line noise and surges. FERRUPS also features precision voltage regulation with no battery discharge down to 38% below nominal (depending upon load); and over 80 user-programmable diagnostic and communications functions.

FERRUPS models include free Eaton Software Suite power management software with connectivity cable, and are BestLink SNMP/WEB-ready for remote management. FERRUPS covers up to US\$250,000 for damage to connected equipment resulting from a spike or surge (U.S. and Canada only).

Product Snapshot

Rating:	500 VA - 10 kVA
Input Voltage:	220/230/240
Output Voltage:	220/230/240
Frequency:	50 Hz
Configuration:	Tower



Eaton NetWatch Client 5.0 has tested compatible with Cisco Unified Communications Manager 4.3. Go to www.eaton.com/PQ/cisco for disclaimer.

Features

- Active Voltage Regulation converts power from almost any AC source into computer grade power
- Eliminates harmful harmonic currents from entering a building's wiring, where they can disrupt computer operations
- Enhanced diagnostics initiates automatic startup and scheduled tests on the logic board, battery and other critical systems
- Provides regulated output voltage without drawing power from batteries keeping the batteries fully charged from unexpected blackouts
- Complete offering of LanSafe® management software included to ensure data integrity
- Enables automatic shutdown of UPS-protected devices with NetWatch 5.0 software
- Warranty
 - 2-Year Limited Warranty
 - \$250,000 Load Protection Guarantee (U.S. and Canada)



Powering Business Worldwide

Technical Specifications

Models	500 VA	700 VA	850 VA	1.15 kVA	1.4 kVA	1.8 kVA	2.1 kVA	3.1 kVA	4.3 kVA	5.3 kVA	7 kVA	10 kVA		
Model Number	QFE500 VA	QFE700 VA	QFE850 VA	QFE1.15 kVA	QFE1.4 kVA	QFE1.8 kVA	QFE2.1 kVA	QFE3.1 kVA	QFE4.3 kVA	QFE5.3 kVA	QFE7 kVA	QFE10 kVA		
Capacity (kVA/kW)	.5/.35	.7/.5	.85/.6	1.15/.8	1.4/1	1.8/1.25	2.1/1.5	3.1/2.2	4.3/3	5.3/3.7	7/5	10/7.5		
Dimensions (inches)	12 x 10 x 21.25			15.1 x 15.2 x 20.2		21.2 x 15.25 x 22.9			29.5 x 15.5 x 25		36.5 x 19 x 32			
H x W x D (mm)	305 x 255 x 540			385 x 390 x 515		540 x 390 x 585			750 x 395 x 635		930 x 485 x 815			
Weight	(lbs)	62	80	86	132	154	183	196	256	360	505	605	875	
	(kg)	28	36	39	60	70	83	89	116	163	229	274	397	
Input Connection								IEC-320		220/19A	220/21A	220/27A	220/43A	
								IEC-320 (10A) male connector		(16A) male	230/18A	230/20A	230/26A	230/41A
										connector	240/17A	240/19A	240/24A	240/39A
Output (quantity)	4								Hardwired output is standard					
Connection (type)	IEC-320 (10A) male connector								Contact Factory for receptacle options					
Typical (Full Load)	9	14	11	18	14	11	9	14	10	20	12	11		
Runtime: (Half Load) (minutes)	25	35	28	48	37	30	25	35	24	50	33	26		

Operation

Nominal Input Voltage	220/230/240											
Input Voltage Range	+15%, -20%											
Operating Frequency	50 Hz Nominal (adjustable limits +_ 0.01 Hz to +_ 3Hz)											
Nominal Output Voltage	220/230/240											
Output Voltage Regulation	± 3% for input voltages of +15% to -20%											
Output Voltage Waveform	Sine wave											
Output Voltage THD	5% or less at rated kW load											
Overload Capacity	150% surge and 125% for 10 min. on line, 150% surge and 110% for 10 minutes on inverter											
Transfer Time	0 ms											
Lightning, Surge & Noise Protection	2000:1 spike attenuation using ANSI/IEEE C62.41 and C62.45 Category A and Category B tests. Common Mode - >120 dB. Normal Mode - >60dB											
Efficiency	85	86	85	88	88	90	90	91	90	90	90	90
Safety Certification	UL 1778, CSA (cUL), GS (TUV), Complies with European Low Voltage Directive 73/23/EEC											
EMI Compliance	FCC Class A, Complies with European Electromagnetic Compatibility Directive 89/336/EEC											
Testing Standards	ANSI/EEE C62.41 (1980); ANSI/EEE C62.45 (1987); IEC 801-2, 801-4, 801-5 EN 50081-1, EN 500082-1, EN 500091-1, EN 500091-2, EN60950											
Communication	RS-232 serial port (DB-25), plus contact closures											

Environmental

Operating Temperature	0 to 40° C											
Storage Temperature	-20° C to +60° C											
Relative Humidity	0 to 95% without condensation											
Audible Noise at 1m	41	41	47	49	49	51	51	51	50	51	54	55
Altitude	3,050m (10,000 ft.) maximum											

All specifications typical and are subject to change without notice. Eaton offers a complete line of uninterruptible power systems from 250 VA to more than 4000 kVA.

UNITED STATES
8609 Six Forks Road
Raleigh, NC 27615 U.S.A.
Toll Free: 1.800.356.5794

www.eaton.com/powerquality

CANADA
Ontario: 416.798.0112
Toll free: 1.800.461.9166

LATIN AMERICA
Argentina: 54.11.4124.4000
Brazil: 55.11.3616.8500
México: 52.55.9000.5252

EUROPE/MIDDLE EAST/AFRICA
Denmark: 45.3686.7910
Finland: 358.94.52.661
France: 33.1.6012.7400
Germany: 49.0.7841.604.0
Italy: 39.02.66.04.05.40
Norway: 47.23.03.65.50
Portugal: 55.11.3616.8500
Sweden: 46.8.598.940.00
United Kingdom: 44.1753.608.700

ASIA PACIFIC
Australia: 61.2.9693.9366
New Zealand: 64.0.3.343.3314
China: 86.21.6361.5599
HK/Korea/Taiwan: 852.2745.6682
India: 91.11.2649.9414 to 18
Singapore/SEA: 65.6825.1668

Eaton, LanSafe, Powerware, PowerChain Management and FERRUPS are trade names, trademarks and/or service marks of Eaton Corporation or its subsidiaries and affiliates. All other trademarks are property of their respective owners.



©2009 Eaton Corporation
All Rights Reserved
Printed in USA
ILP0368
February 2009

