



# Powerware

## Powerware® FERRUPS® FE Series 60 Hz

Unrivaled reliability in configurable power protection for computers and telecommunications equipment



### 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 full charged from unexpected blackouts
- Complete offering of LanSafe™ power management software included to ensure data integrity
- Triple Power Warranty (U.S. and Canada)
  - 10-Year Pro-Rated Warranty
  - 60-Day Money Back Guarantee
  - \$25,000 Load Protection Guarantee

### Product Snapshot

<b>Rating:</b>	500 VA - 18 kVA
<b>Input Voltage:</b>	120/208/240, 208/240
<b>Output Voltage:</b>	120/208/240
<b>Frequency:</b>	60 Hz
<b>Configuration:</b>	Cabinet

Powerware FERRUPS® uninterruptible power systems 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-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 Powerware Software Suite power management software with connectivity cable, and are BestLink SNMP/WEB-ready for remote management. FERRUPS is covered by the industry's longest warranty and covers up to US\$25,000 for damage to connected equipment resulting from a spike or surge (U.S. and Canada only).

**FE SERIES, 60HZ 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	12.5 kVA	18 kVA
Part Number	FE500 VA	FE700 VA	FE850 VA	FE1.15 kVA	FE1.4 kVA	FE1.8 kVA	FE2.1 kVA	FE3.1 kVA	FE4.3 kVA	FE5.3 kVA	FE7 kVA	FE10 kVA	FE12.5 kVA	FE18 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	12.5/10	18/15
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	79	85	132	154	183	196	256	359	505	604	875	1089	1362
(kg)	28	36	39	60	70	83	89	116	163	229	274	397	494	618
Input Connection	6 ft. cord w/NEMA 5-15P*					6 ft. cord w/NEMA 5-20P*	6 ft. cord 120V/40A 120V/40A 120V/40A w/NEMA 208V/25A 208V/30A 208V/40A 208V/60A 208V/75A 208V=115A L5-30P* 240V/20A 240V/25A 240V/35A 240V/50A 240V/65A 240V=100A							
Output Connection (quantity)	4			6		6		Hardwired output is standard						
(type)	NEMA 5-15R			NEMA 5-15R		NEMA 5-15R		Contact Factory for receptacle options						
Typical Runtime: (Full Load)	9	14	11	18	14	11	9	14	10	20	12	11	18	10
(minutes) (Half Load)	25	35	28	48	37	30	25	35	24	50	33	26	48	26

**Operation**

Nominal Input Voltage	120/208/240										208/240			
Input Voltage Range	+15%, -20%													
Input Power Factor	0.98													
Nominal Output Voltage	120/208/240													
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 - >60 dB													
Efficiency	85	86	85	88	88	90	90	91	90	90	90	90	91	92
Safety Certification	UL, CSA (cUL)													
EMI Compliance	FCC Class A													
Testing Standards	ANSI/EEE C62.41 (1980); ANSI/EEE C62.45 (1987); IEC 801-2, 801-4, 801-5													
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	5 to 95% without condensation													
Audible Noise at 1m	41	41	47	49	49	51	51	51	50	51	52	55	56	57
Altitude	3, 050m (10,000 ft.) maximum													

All specifications subject to change without notice.

Eaton offers a complete line of Powerware uninterruptible power systems from 250 VA to more than 4000 kVA.

\*120 V Standard Configuration

\*\*Batteries in second cabinet. Contact factory for weights and dimensions.

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