

#### Features



- Pure sine wave output
- DSP digital control
- Boost and buck AVR for voltage stabilization
- Auto sensing frequency
- Adjustable charging current and battery shutdown point
- Settable ECO mode and no-load shutdown
- Humanized alarm system
- Power-on self test
- Cold start
- Auto restart when mains power is restored
- Intelligent battery management
- Short circuit and overload protection
- Automatic charging in OFF mode
- USB & RJ45, AS400 / SNMP (optional) communication port



## F11 FEATURES



3 kVA (H)



3 kVA (S)

1. USB / RJ45
2. Output Outlets
3. EXT Battery (optional)
4. AC Breaker
5. Input
6. SNMP (optional)
7. Fan

- مجهز به استابلایزر AVR
- امکان تنظیم جریان شارژ و ولتاژ قطع باتری
- امکان کارکرد در حالت خاموشی خودکار در حالت بی‌باری
- شروع به کار خودکار پس از وصل مجدد برق ورودی
- شروع به کار با انرژی باتری
- تکنولوژی Line Interactive

# F11

## Line Interactive UPS

### Specifications

Model	F11-500	F11-1000	F11-1500	F11-2000	F11-3000	
Capacity	500 VA / 300 W	1000 VA / 800 W	1500 VA / 1200 W	2000 VA / 1600 W	3000 VA / 2400 W	
<b>DC INPUT</b>						
Rated voltage	12 V	24 V		36 V (S) 48 V (H)	48 V	
DC input range (default)	10 ~ 15 V	20 ~ 30 V		30 ~ 45 V (S) 40 ~ 60 V (H)	40 ~ 60 V	
<b>AC INPUT</b>						
AC input range (bypass mode)	0 ~ 121 / 132 / 138 / 144 Vac for 100 / 110 / 115 / 120 Vac ± 10 Vac 0 ~ 242 / 264 / 276 / 288 Vac for 200 / 220 / 230 / 240 Vac ± 10 Vac					
AC input range (mains mode)	100 V: 70 ~ 130 Vac 110 V: 80 ~ 140 Vac 115 V: 85 ~ 145 Vac 120 V: 90 ~ 150 Vac 200 V: 145 ~ 260 Vac 220 V: 165 ~ 280 Vac 230 V: 175 ~ 290 Vac 240 V: 185 ~ 300 Vac					
Frequency input range	50 / 60 Hz (auto-sensing), 50 / 60 Hz ± 5% ~ 15%					
Generator connection	Available (generator input power is settable)					
<b>OUTPUT</b>						
Inverter output range	100 / 110 / 115 / 120 / 200 / 220 / 230 / 240 Vac ± 5% (settable)					
AC output range (bypass mode)	0 ~ 121 / 132 / 138 / 144 Vac for 100 / 110 / 115 / 120 Vac ± 10 Vac 0 ~ 242 / 264 / 276 / 288 Vac for 200 / 220 / 230 V / 240 Vac ± 10 Vac					
AC output range (mains mode)	100 V: 90 ~ 110 Vac 110 V: 99 ~ 121 Vac 115 V: 103 ~ 126 Vac 120 V: 108 ~ 132 Vac 200 V: 166 ~ 226 Vac 220 V: 188 ~ 245 Vac 230 V: 199 ~ 254 Vac 240 V: 210 ~ 264 Vac					
Output frequency	50 / 60 Hz ± 0.3 Hz (settable)					
Waveform	Pure sine wave					
Inverter efficiency	Max. 75%	Max. 80%		Max. 85%		
Energy saving mode	Settable (< 3% load), enter in 80 s					
No-load shutdown	Settable (< 3% load), shut down in 80 s					
Transfer time	≤ 10 ms					
THDV (resistive load)	≤ 5%					
Protections	Overload, short circuit (inverter), battery low voltage, battery overcharge, overtemperature					
Overload (mains mode)	110% for 120 s, 125% for 60 s, 150% for 10 s (transfer to bypass mode)					
Overload (inverter mode)	110% for 60 s, 125% for 10 s, 150% for 5 s (shut down directly)					
Mute	Automatic mute in 60 s or by manual					
<b>BATTERIES</b>						
Inbuilt battery (standard model)	/	12 V / 7 Ah x 2	12 V / 9 Ah x 2	12 V / 9 Ah x 3	12 V / 9 Ah x 4	
Charging current	Standard model (S): 1 A (default)					
	Long time model (H): 10 A (default); < 10 A, set step 1 A; ≥ 10 A, set step 5 A					
	Max. 10 A (H)	Max. 15 A (H)	/	Max. 20 A (H)	Max. 25 A (H)	
Equalizing charge voltage	Single battery 14.1 Vdc (default), 13.6 ~ 15 Vdc adjustable					
Floating charge voltage	Single battery 13.5 Vdc (default), 13.2 ~ 14.6 Vdc adjustable					
Low voltage alarm point	Single battery 10.8 Vdc (default), 9.6 ~ 13 Vdc adjustable					
Low voltage shutdown point	Single battery 10.2 Vdc (default), 9.6 ~ 11.5 Vdc adjustable					
<b>OTHERS</b>						
Communications	USB & RJ45 (standard), dry contacts / SNMP (optional)					
Operating temperature	5°C ~ 40°C					
Operating humidity	Relative humidity ≤ 93%					
Noise level	≤ 50 dB (1 m)					
Tower	Dimensions (W × D × H) (mm)	144 × 345 × 215 (S / H)		144 × 410 × 215 (S) 144 × 345 × 215 (H)	157.5 × 460 × 221.5 (S) 190 × 467 × 335.5 (H)	
	Packaged dimensions (W × D × H) (mm)	236 × 427 × 316 (S / H)		236 × 492 × 316 (S) 236 × 427 × 316 (H)	238 × 550 × 305 (S) 320 × 592 × 462 (H)	
	Net weight (kg)	7.0 (H)	12.2 (S) 11.6 (H)	14.2 (S)	18.5 (S) 17.8 (H)	23.6 (S) 28.0 (H)
	Gross weight (kg)	8.0 (H)	13.2 (S) 12.6 (H)	15.2 (S)	19.8 (S) 18.8 (H)	25 (S) 30.0 (H)
Rack-mount	Dimensions (W × D × H) (mm)	/	440 × 338 × 88 (S)	440 × 410 × 132 (S)		
	Packaged dimensions (W × D × H) (mm)	/	611 × 448 × 208 (S)	611 × 505 × 235 (S)		
	Net weight (kg)	/	14.6 (S)	17.2 (S)	21.3 (S)	26.7 (S)
	Gross weight (kg)	/	16.8 (S)	20.4 (S)	24.5 (S)	30.5 (S)

- S means standard model, H means long time model.
- All specifications are subject to change without notice.
- Custom-made specifications are acceptable.