

BIUN SERIES

1kVA-3kVA Online UPS

PF 0.9



Features

- High frequency on-line double conversion technology
- DSP (Digital signal processors) control technology
- Active power factor correction (APFC), input power factor up to 0.99
- Output power factor 0.9
- Wide input voltage range (110 V ~ 300 Vac) and frequency range (40 ~ 70 Hz)
- Auto sensing frequency
- 50 / 60 Hz frequency conversion
- Cold start
- Rear ventilation design and variable speed fan
- Effective software and hardware protection
- Quick and stable charging, 90% capacity restored in 3 h (standard model UPS)

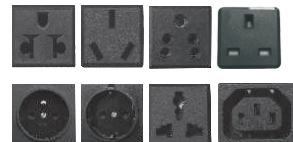
- Linear derating in low voltage input reducing battery discharging times
- Settable delayed start when power is restored
- Advanced battery management (ABM)
- Multiple functions settable via LCD: output voltage, EOD, auto-start, bypass mode, ECO mode and frequency conversion mode
- Multi-platform communications: RS232 (standard), USB / RS485 / SNMP / dry contacts (optional)

Available Options

- Optional USB, RS485 card, AS400 dry contacts, SNMP card, SMS alarms, EPO function, and 12 A charger (2/3 kVA only)

Rear Panel

1. Overcurrent Protection
2. AC Input
3. Modem/Tel/Fax
4. DC Input
5. Outlets
6. Fan
7. RS232
8. EPO (optional)
9. USB (optional)
10. SNMP/AS400 (optional)



Optional outlets

Specifications

MODEL	BIUN1K			BIUN2K			BIUN3K		
Capacity	1 kVA / 900 W			2 kVA / 1800 W			3 kVA / 2700 W		
INPUT									
Rated voltage	208 / 220 / 230 / 240 Vac								
Voltage range	110 ~ 176 Vac (linear derating between 50% and 100% load); 176 ~ 280 Vac (no derating); 280 ~ 300 Vac (derating 50%)								
Frequency	40 ~ 70 Hz (auto-sensing)								
Power factor	≥ 0.99								
Bypass voltage range	- 25% ~ +15% (settable)								
Total harmonic distortion (THDi)	≤ 6%								
OUTPUT									
Voltage	208 / 220 / 230 / 240 Vac (settable via LCD)								
Voltage regulation	± 1%								
Frequency	45 ~ 55 Hz or 55 ~ 65 Hz (synchronized range); 50 / 60 Hz±0.1 Hz (battery mode)								
Waveform	Sinusoidal								
Power factor	0.9								
Total harmonic distortion (THDv)	≤ 2% (linear load), ≤ 5% (non-linear load)								
Crest factor	3:1								
Overload	105% ~ 125% for 1 min, 125% ~ 150% for 30 s, > 150% for 300 ms								
BATTERIES									
DC voltage	24 V (S)	36 V (S)	24 / 36 V (H)	48 V (S)	72 V (S)	48 / 72 V (H)	72 V (S)	96 V (S)	72 / 96 V (H)
Inbuilt battery	2×9 Ah	3×7 Ah	/	4×9 Ah	6×7 Ah	/	6×9 Ah	8×7 Ah	/
Charging current (max.)	1 A		6 A	1 A		6 A	1 A		6 A
Recharge time	Standard model: 90% capacity restored in 3 hours; Long time model: depend on the capacity of battery								
SYSTEM									
Efficiency	≥ 90% (Mains mode)			≥ 91% (Mains mode)			≥ 92% (Mains mode)		
	≥ 85% (Battery mode)			≥ 86% (Battery mode)			≥ 87% (Battery mode)		
	≥ 95% (ECO mode)			≥ 96% (ECO mode)			≥ 97% (ECO mode)		
Transfer time	Mains mode to battery mode: 0 ms Inverter mode to bypass mode: 4 ms (typical)								
Protections	Short-circuit, overload, overtemperature, battery discharge protection and fan testing protection								
Communications	RS232 (standard), USB / RS485 / dry contacts / SNMP (optional)								
Display	LCD + LED								
Standards	EN 62040-1, EN 62040-2, EN 61000-3-2, EN 61000-3-3, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11, IEC 61000-2-2, IEC 62040-2, IEC 62040-1, IEC 62040-3								
OTHERS									
Operating temperature	0°C ~ 40°C								
Storage temperature	-25°C ~ 55°C (without batteries)								
Relative Humidity	0 ~ 95% (non-condensing)								
Altitude	≤ 1000 m, derating 1% for each additional 100 m								
IP rating	IP 20								
Noise level at 1m	≤ 50 dB								
Dimensions (W×D×H) (mm)	144×336 ×214	144×414 ×214	144×336 ×214	191 × 418 × 335			191×464 ×335	191×418 ×335	
Packaged dimensions (W×D×H) (mm)	232×417 ×318	230×492 ×320	232×417 ×318	277× 500 × 435			320×573 ×472	277×500 ×435	
Net weight (kg)	9.5	13	6	18	25.7	10.5	27.2	32	11
Gross weight (kg)	10.5	14.2	7	19.5	27.4	12	29	34	12.5

- Derate capacity to 70% in CUCF mode and to 90% when the output voltage is adjusted to 208 Vac.
- S means standard model, H means long time model.
- All specifications are subject to change without notice.
- Custom-made specifications are acceptable.