

BI Series

10 kVA ~ 20 kVA (3:1)



Industry



Medical



Data Center



Transport



Malls & Facilities



Home



Emergency



Office

1. Generator rating $\geq 2 \times$ UPS rating
2. Could be adjusted by software. %10 derating for 208VAC/200VAC.
3. Full RCD load
4. Full R load

Model	BI 10kVA 3:1	BI 15kVA 3:1	BI 20kVA 3:1
Input			
Input voltage			
Rated voltage	380VAC/220VAC		
Phase	three phases with ground		
Turn on voltage range	(120 \pm 5~274 \pm 5) VAC		
Bypass voltage range	(60 \pm 5~300 \pm 5) VAC		
Rated frequency	50Hz		
Input power factor			
Input power factor	> 0.95		
Generator	Support generator input ¹		
Input current			
Rated current	14A	21A	27A
Input THDI	$\leq 30\%$		
Output			
Output power			
VA/watt	10kVA/8kW	15kVA/12kW	20KVA/16kW
Rated voltage	220VAC		
Phase	one phase with ground		
Voltage range	200/208/220/230/240VAC ²		
Voltage regulation	$\pm 1\%$		
Voltage distortion	$\leq 7\%$ ³ $\leq 3\%$ ⁴		
Crest ration	3:1		
Output frequency range			
Normal mode	1. Same as input frequency (46Hz~54Hz) 2. 50 Hz (Input frequency > 54Hz or Input frequency < 46Hz)		
Battery mode	(50 \pm 0.1) Hz		
Output protection			
Rating protection	50A Breaker	80A Breaker	100A Breaker
Battery and charger			
Battery			
Rated voltage	240 Vdc		
Type/Rating	Sealed Lead Acid (SLA) 12 V		
Battery quantity	20		
Charger current	5A		
Machinery features			
Dimension and weight			
Dimensions (D x W x H) [mm]	501x260x533		
weight [Kg]	23	32	33

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Features

- ◆ Advanced DSP control technology, rectification and inversion are controlled by DSP
- ◆ System efficiency up to 92%, energy saving rate is doubled
- ◆ Wide input voltage range, 50 / 60 Hz auto-sensing frequency
- ◆ 50 Hz / 60 Hz frequency conversion mode
- ◆ Output power factor 0.8
- ◆ Compact internal layout, small footprint
- ◆ Fan speed varies intelligently with temperature, reducing noise and extending its service life
- ◆ Conformal coating technology to make UPS operate in harsh environment for a long time
- ◆ Linear downgrading in low voltage input reducing battery discharging times
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- ◆ Active Power Factor Correction Technology, input power factor up to 0.95
- ◆ Ability to switch on the UPS by battery in the absence of main power (Cold start)
- ◆ Zero switching time for UPS power supply mode when the main power is unstable, ensuring the output is uninterrupted
- ◆ Friendly human & machine interface
- ◆ Dual input design, supporting independent bypass
- ◆ Advanced multi-platform communication for UPS monitoring: RS232, USB, RS485, NET, dry contacts, SNMP card and EPO
- ◆ Effective hardware and software protection, robust self-diagnosis function, abundant event log for future check
- ◆ Intelligent battery management, automatic equalized and float charging control, charger dormancy control, improving the reliability of charger and extending the battery life

Model	BI 10kVA 3:1	BI 15kVA 3:1	BI 20kVA 3:1
General			
Reliability			
MTBF/MTTR	>200000 hrs / <30 mins		
Protection			
Full protection functions	Overload, Over Temperature, Output Short Circuit, Battery EOD (Deep Charge), Ac Line & Neutral Reverse Connection Protection; Self Testing		
Low alarm voltage / comeback voltage	(180.8V±4V) / (188.8V±4V)		
Shutdown voltage/ comeback voltage	(160V±4V) / (168V±4V)		
Overcharge protection/ comeback voltage	(249.6V±4V) / (216V±4V)		
Leakage current	< 500uA		
system			
Efficiency			
Normal mode	> 92%		
Battery mode	> 90%		
Overload			
	Overload warning only (105%±5%≤load)		
Normal mode/battery mode	1min, then transfer to bypass and alarm (105%±5%<load≤125%±5%) 30S, then transfer to bypass and alarm (125%±5%<load≤135%±5%) 300ms, then transfer to bypass and alarm (135%±5%<load)		
Automatically retransfer	YES		
Environment			
Work temperature	0°C~40°C		
Altitude	<1000m		
Work humidity	20%~95%		
Audible noise	≤65dB		
Storage temperature	-15°C~45°C		
Standard			
EMS	IEC61000-4		
EMI	EN55022		
Safety	GB4943-2001/IEC62040-1		
	GB-T4857-18		
Transportation	B-WR129-1(GB-T14715-93)		