

AC Power Systems Three Phase 10-20kVA



Centralized Lighting Inverter

Catalog Number
Notes
Type

APPLICATION

- Operates LED, incandescent, magnetic and electronic ballast fluorescent, high power factor compact fluorescent and high intensity discharge (HID) luminaires.
- Schools, Sports Facilities, Universities, Mass Transit, Warehouses.
- Provides conditioned, uninterruptible power for other types of critical loads.
- Consult factory for non-lighting load applications.

SAFETY LISTINGS

- UL 924 Emergency Lighting Equipment.
- UL 924 Auxiliary Lighting Equipment.
- NFPA 101, NFPA 111
- NEC.

WARRANTY

- Standard warranty: (requires execution of factory start-up within 120 days of shipment) Brite Path will provide parts and on-site labor for the first 12 months following start-up of the product, and parts only for an additional 12 months. If factory start-up is not executed within 120 days of shipment, Brite Path will provide a parts warranty for 24 months from the date of shipment.
- Factory Start-Up Service included.
- Extended warranty available: consult factory for extended warranty and service option.

DESIGN

- Free standing, NEMA 1 enclosure with lockable control access panel.
- Double conversion, no interruption output.
- Solid state pulse width modulated inverter.
- Internal, automatic static bypass switch.
- Internal, make before break maintenance by-pass.
- Standard, UL 924 compliant, 90 minute battery back up.
- Microprocessor control and diagnostic system.
- LCD Color touch screen display.
- User programmable automatic testing / logging.
- It is compatible with all luminaires and has a peak overload capability of 1700% to accommodate in-rush current from LED luminaires.
- Overload rating 110% for 2 minutes, 150% for 10 seconds, 400% for 4 cycles (without use of static bypass).
- RS 232 Communications Port.
- Fault annunciating local audible alarm.
- Optional output circuit breakers and circuit breakers with trip alarm
- Optional normally off load.
- Optional Web Based Communications.
- Optional Seismic certification.
- Optional Relay contacts.
- 90% typical efficiency.
- Operating temperature range 68°F (20°C) to 95°F (35°C)1.
- Storage temperature -4°F (-20°C) to 122°F (50°C).
- Optional fault current rating 65 kAIC.

ORDERING INFORMATION

Example: PS3 F15S NMNMMMZ

PS3	Series	Vin / Vout	Unit Size	Battery Time	OCB Distribution	OCB Distribution	Seismic Rated	WebBased Communications	Relay Contacts
	PS3 – BritePath Lighting Three Phase Inverter System	F – 208/120Vin-Vout G – 480/277Vin-Vout	10 – 10 kVA 13 – 13kVA 15 – 15kVA 17 – 17kVA 20 – 20kVA	S – 90 min R – Other	EXAMPLE NMNMMM	IF NEEDED	Z – Seismic Rated (blank) – N/A	W – TCP/IP Modbus TCP Modbus RS45 BACnet / IP BACnet MS / TP (blank) – N/A	R – Relay Card (blank) – N/A

OUTPUT TYPE	BREAKERS(s)	TRIP ALARM	POLE	VOLTS	AMPS
N=NORMAL ON	M - Output Main Only	N=No Alarm (up to 36)	M - main	M - main	M - main
T=TIMED NORMAL OFF	1-36 (36 poles total)	A=Trip Alarm (up to 24)	X-1P Y-2P T-3P	E=208 H=480	20 30 50



ELECTRICAL INPUT

- Input Voltage: 208Y/120V or 480Y/277V
- 3 Phase, 4 Wire + ground input
- Input voltage operating range +10 / -15%
- Frequency range 60 Hz, ± 2.5 Hz.
- Input harmonic current distortion < 10% THD.
- Input power factor correcting to 0.98.

ELECTRICAL OUTPUT

- Output Voltage: 208Y/120V or 480Y/277V
- 3 Phase, 4 Wire + ground output
- Output voltage regulation +/-3%
- Frequency range 60 Hz, ± 0.5 Hz. in battery mode.
- Output voltage distortion: 3% max THD with linear load.

BATTERY

- Maintenance free, valve regulated sealed lead calcium battery with a design life up to 10 years, and optimum operating range of 65°F (19°C) to 85°F (30°C).¹
- 3 Stage, temperature compensated charger, 1% ripple.
- Automatic low battery voltage disconnect.
- Recharge time UL924 / NFPA101 compliant (24 hours).
- Front access terminals.
- Ripple voltage < 1% rms float voltage.
- Battery warranty is 1 year full / 9 years pro-rated.

Footnote

¹ Optimum operating temperature of batteries is 77°F (25°C).
Temperatures above 85°F (30°C) adversely impact battery life.

System input/output

Rating	Voltage In/Out	Max Input Amps ¹	Max Output Amps per phase ²	BTU / Hour	Weight (Lbs)	Cabinet Configuration
10	208/120	34.0	27.8	3410	2828	A
10	480/277	15.5	12.0	3410	3120	B
13	208/120	43.0	36.1	4433	3200	A
13	480/277	19.3	15.6	4433	3642	B
15	208/120	54.3	41.7	7161	4634	B
15	480/277	22.0	18.1	5115	3642	B
17	208/120	60.7	47.2	8116	4872	B
17	480/277	25.1	20.4	5797	4356	B
20	208/120	72.0	55.5	9548	5502	C
20	480/277	29.3	24.1	6820	4356	B

¹Continuous duty

²Consult factory for current ratings for voltage configurations not shown above.

DIMENSIONS



Cabinet configuration A

Width* – 52"

Electronics cabinet – 29"
Battery cabinet – 23"

Height – 77"

Depth – 33"



Cabinet configuration B

Width* – 63"

Electronics cabinet – 29"
Battery cabinet – 34"

Height – 77"

Depth – 33"



Cabinet configuration C

Width* – 70"

Electronics cabinet – 29"
Battery cabinet – 41"

Height – 77"

Depth – 33"

*Adding output circuit breaker (OCB) options increases total width by 14"