



The NetWave® NWKBB100 DC-Battery Power Solution provides consistent power for your devices in locations where power is on a timer or they have frequent blackouts or brownouts. The NWKBB100 supports AC input ranging from 110 to 277 VAC, and can also support higher voltages using a Step Down Transformer.

The intelligent controller distributes power to the load and batteries when AC power is available and instantly switches over to DC output only when AC power is lost.

The kit includes valve-regulated lead-acid batteries, outdoor enclosure, mounting bracket and Smart DC-Battery Power Controller. The aluminum outdoor enclosure has two 180° door hinges and a pad lockable latch for security. The enclosure has built in mounting brackets that support pole and wall mounting.

## FEATURES

- › Power supply, battery charger, battery care module and battery backup module in one controller
- › Three battery charging modes
  - Boost, Trickle and Recovery Charge
- › Absorption Glass Matt (AGM) Batteries included
- › Adjustable charging current
- › Battery diagnostic and fault identification LED built in
- › Several output protection features such as short circuit, deep battery discharge etc.
- › Operating Temperature -25 to +70° C

## APPLICATIONS

- › Ideal for PoE Camera connectivity at light poles when power is only provided at night when a used with a PoE Switch
- › Emergency DC-Battery Power Backup for critical edge devices
- › Simple to deploy DC-Battery can be used indoors to backup Access Control, Automatic Revolving Doors, Fire Alarms, Emergency Lighting and many other applications

SPECIFICATIONS

<b>Power</b>		<b>Load Output</b>	
Nominal Input Voltage	115 / 230 ~ 277 VAC	Output Voltage (at $I_n$ )	44 ~ 57.6 VDC
Voltage range	90-135 / 180-305 VAC	Nominal current $I_{load}$	$1.1 \times I_n \pm 5\%$
Inrush Current	$\leq 42 \text{ A} \leq 5 \text{ msec}$ ( $V_n - I_n$ nom. Load)	Continuous current (w/out battery) $I_{load} = I_n$	10 A
Frequency	47 - 63 Hz	Continuous current (w/ battery) $I_{load} = I_n + I_{batt}$	20 A
Input Current	3.3 ~ 2.2 A (115 - 230 VAC)	Max. Current Output load (main) $I_{load}$ (4sec.)	30 A max.
Internal fuse	4 A (factory replaceable)	Max. Current Output Load (backup) $I_{load}$ (4 sec.)	20 A max.
External Fuse	16A (recommended)	Push Button Start	From battery without main
		Protection Alarm against total discharge	38-40 VDC battery
		Threshold alarm for battery almost flat	40-42 VDC battery
<b>Output</b>		<b>Backup Power</b>	
Output Voltage ( $V_n$ ) / Nominal Current ( $I_n$ )	48 VDC / 5 A	Battery Voltage	48 VDC
Output Current $I_n$	5 A		(4 × 12 VDC AGM Batteries in Series)
Efficiency (at 50% of rated current)	≥ 83%	Battery Capacity	24Ah × 4
Turn-On delay after applying input voltage	1.5 sec. (max)		
Start up with Strong Load (capacitive load)	Yes, Unlimited	<b>Continuous Power Reserve Time</b>	
Dissipation power load max	48 W	15W Load	40 Hours Backup Time
		30W Load	18 Hours Backup Time
		60W Load	8 Hours Backup Time
<b>Battery Output</b>		<b>Mechanical</b>	
Boost charge (25 °C) (at $I_n$ )	57.6 VDC	Enclosure	Powder Coated Steel
Max. time Bust Charge	15 h	Enclosure Size	16 × 16 × 10 in (40.64 × 40.64 × 25.4 cm)
Min. time Bust Charge	1 min.	Shipping Weight	125 lb / 56.7 kg
Trickle charge (25 °C) (at $I_n$ )	56 VDC		
Recovery Charge	2 ~ 24 VDC	<b>Environmental</b>	
Charging current max $I_{batt}$	5 A ± 5%	MTBF	>100,000 hours
Charging current limiting $I_{adj}$	20 ÷ 100 % / $I_{batt}$	Operating Temp	-40° C to +70° C
Reverse battery protection	Yes	Storage Temp	-40° C to +85° C
Sulfated battery check	Yes by Jumper		
Detection of element in short circuit	Yes		
Quiescent Current	≤ 5 mA		
Charging Curve automatic:	$I_{U00}$ 3 stage		

Listed power ratings under ideal conditions( 70°F / 21.1°C).

Batteries can lose up to 50% power below -17.8°C / 0°F.

Minimum recharge time varies by application, ComNet recommends a minimum of 8 hours of charging per day.



 Low Power Consumption

ORDERING INFORMATION

Part Number	Description
NWKBB100	Individual DC-Battery Backup system with Smart Controller, Enclosure, Batteries and Mounting Kit
Included Accessories	Mounting Hardware Kit (For Pole Mounting Only), 4 × 24Ah 12V batteries, Smart Controller, Internal Cabling and Enclosure
Options	User selection of Industrially Hardened NetWave® Wireless Ethernet Units NWPM4848G - 48 VDC Input 35 W Midspan Power Injector [3] Add suffix 'NB' to the part number you order if you wish to exclude battery from the kit

In a continuing effort to improve and advance technology, product specifications are subject to change without notice.

TYPICAL APPLICATION

