



# Telecel® Standby & Cycle Battery for Telecom

## High-density, environmentally-hardened, long-life battery for back-up and renewable energy

### Overview

Telecel® utilizes lithium iron phosphate (LiFePO<sub>4</sub>) battery technology and represents a leap forward in price, safety and reliability. Compared to lead-acid batteries, the cost of Telecel batteries is at least 20% lower over the first five years of life and offers even greater savings over the total projected life of the battery of 10 to 15 years\*. In addition, the initial cost is at least 20% less than competing lithium batteries.

### Applications

Ideal for battery backup, renewable energy and generator systems, both on-grid and off-grid, Telecel offers safe, compact, high-density energy storage for wireless sites and other infrastructure.

### Replace Lead-Acid Batteries

Replacing existing lead-acid batteries with Telecel is simple. The 24-volt units have a similar footprint to standard 12-volt lead-acid batteries, mount on existing battery trays and are fitted with Anderson PowerPole housings for quick, easy installation\*\*.

### Reduce Energy Costs

With its 3000+ cycles, Telecel can power a site during daily peak electric rates, and recharge during off-peak, reducing the utility bill by up to 30%\*. This cycling capability also supports future installation of renewable energy generation, reducing utility bills by an additional 25%\*.

### Wide Operating Temperatures

Providing full rated capacity over a wide temperature range and all the way up to maximum charge/discharge current, Telecel has up to 37% longer run-time than lead-acid, for the same rated capacity.

### Features

- ❖ Battery cells are UL 1642 certified
- ❖ Series/parallel configurations for 24 and 48 V systems
- ❖ Safe, high-density energy storage and backup
- ❖ Lightweight at one-third the weight of lead-acid
- ❖ Compact at half the volume of lead-acid
- ❖ On-grid and off-grid applications
- ❖ Wide operating temperature range
- ❖ Long life - up to 10 times the life of lead-acid in unconditioned enclosures

\*Based on typical network deployment. Actual cost benefit varies with application.

\*\*Some applications may require the addition of a 1RU Battery Multiplexer™ unit.

### Electrical Performance and Connections

Part Number:		PB24-7B60	PB24-7B100	PB24-7B180
Nominal Capacity		62 Ah (1389 Wh)	104 Ah (2330 Wh)	188 Ah (4512 Wh)
Internal Resistance		<1.0 milliohms	<1.0 milliohms	<1.0 milliohms
Power Connection		Anderson PowerPole	Anderson PowerPole	Anderson PowerPole
Voltage	Charge	25.2	25.2	25.2
	Open Circuit	23.8	23.8	23.8
	95% Discharged	21.0	21.0	21.0
Charge	Standard	1.3C (100 A)	0.8C (100 A)	0.5C (100 A)
Discharge	Standard	1.3C (100 A)	0.8C (100 A)	0.5C (100 A)
	Self Discharge	<3% per month	<3% per month	<3% per month

### Size and Weight

Height	11.1 inches (282 mm)	11.1 inches (282 mm)	14.0 inches (356 mm)
Width	5.7 inches (144 mm)	5.7 inches (144 mm)	7.1 inches (180 mm)
Depth (Length)	18.6 inches (471 mm)	18.6 inches (471 mm)	19.5 inches (495 mm)
Weight (as shipped)	43.1 pounds (19.5 kg)	57.0 pounds (25.8 kg)	96.8 pounds (43.9 kg)

### Constant Power Output to 21 V (watts at 25°C)

Hours of runtime:	4	329	553	999
	6	219	369	666
	8	164	277	500
	10	132	221	400
	12	110	184	333
	24	55	92	167

### Temperature Derating

-20°C (-4°F)	21%
+55°C (+131°F)	1%

### Temperature

Charge	0° to +55°C (32° to +131°F)
Discharge	-25° to +55°C (13° to +131°F)
Maximum Recommended	+75°C (167°F)
Long-Term Shell Resistance	+130°C (266°F)
Transient Shell Resistance	+170°C (338°F)

### Cycle and Standby Life

Depth of Discharge	Cycles	Estimated Years***
80%	2000	5
70%	3000	8
25%	8000	20
Float/Standby	N/A	10 to 15

\*\*\* Based on one cycle per day.

Specifications are subject to change without notice



PB Telecom, Inc.  
303 Battery Street  
Seattle, WA 98121  
206 838 9275

www.pbtelecom.net