



## Why Power Products Two-Way Radio Batteries?

- Japanese cells are used in most of our batteries<sup>1</sup>. These cells provide outstanding performance and longer cycle life. In addition, our batteries incorporate specialized circuitry for over-charge, over-discharge, and over-temperature protection where required.
- The designs of our battery housings precisely match the dimensions of the OEM battery; they are compatible with the appearance and measurements required for excellent fit on the radio.
- Our housings are made from a high-grade ABS or PC comparable to the plastics used by most OEMs and superior to the plastic used by other aftermarket suppliers. When housings are produced, samples are tested in four ways. First, there is the “hammer test” where the plastics are aggressively struck with a hammer; if the plastics easily crack (plastics too brittle), the lot is rejected. Second, housings are measured and compared to the design drawings; the samples must match. Third, the housings are assembled into finished packs and checked on a radio for fit and appearance; the battery pack must attach and latch correctly and meet appearance criteria. And fourth, the battery packs are subjected to a drop test on six sides; there can be no breakage or cracking.
- In terms of durability (ability to withstand breakage from dropping and vibration), our battery packs are among the best in the industry, and this includes OEM batteries. Internal components and cells are unitized, flex boards are used when needed, and housings are ultrasonically welded.
- Our battery contacts are gold plated. This increases cost, but reduces corrosion, minimizes resistance, and improves appearance.
- Our batteries are fully compatible with OEM chargers.
- Our batteries for Motorola radios include a clip (where required) at no additional charge.
- Our Li-Ion and LiPo batteries are lab tested to certify compliance with UN38.3 safety requirements for air and sea transport. Our intrinsically safe (IS) batteries are lab tested and certified to TIA-4950 / UL 913 5<sup>th</sup> Edition standards.
- PolyMax HPC™ batteries (PM prefix) feature a 24-month warranty. All other models (BP / LE prefix) have a 12-month warranty. Cycle life varies by chemistry and cell manufacturer, but generally batteries with NiMH and NiCd cells provide 500 cycles and batteries with Li-Ion / LiPo provide 300 – 800 cycles. These end-of-life cycle life numbers represent the point at which the pack will only charge to 80% of its original capacity.
- Because of our design and fabrication process, as well as cell type and component selection, Power Products batteries enjoy a well-earned reputation for performance and reliability.

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<sup>1</sup> Japanese cells are not available for some packs due to chemistry, pack size, or other market requirements.