

Discover[®] ADVANCED ENERGY

Lithium-Ion Battery Systems



A PENNY SAVED IS A PENNY EARNED.



DISCOVER AES SAVES MORE THAN 15% EVERY TIME YOUR SYSTEM CYCLES OVER LEAD ACID BATTERIES.

With round-trip efficiency measured at >95%, MISER technology by Discover saves homeowners at least 15% of their stored energy capacity, each and every time they cycle their system when compared to high quality, lead acid battery options.

To borrow an old cliché, a penny saved is a penny earned. In the solar industry, inverter and module manufacturers have been competing around conversion efficiency since the turn of the century. They beat each other up mercilessly over fractions of % efficiency gains and, to their credit, the modules and inverters on the market today are far superior to what was available even 10 years ago.

There are three major component investments in any off-grid or micro-grid system. Current inverter and module technologies are nearly optimized for efficiency leaving batteries as the only component offering real, tangible improvement.

In the energy storage business, Round Trip Efficiency (RTE) is the measure of the energy wasted each and every

charge/discharge cycle new high-quality lead acid battery have at best an 80% RTE, which can decline rapidly as the batteries age.

DISCOVER AES LiFePO₄ BATTERIES WITH MISER OFFER YOUR CUSTOMERS THE ABILITY TO SAVE 1.5 KWH IN ENERGY COST FOR EVERY 10 KWH OF ENERGY STORAGE THEY OWN, EACH AND EVERY CYCLE.

With an average electricity tariff of 0.15 \$/kWh in the United States, that is \$1.50 savings per cycle or \$547.50 per year with only a single cycle use per day.

In Japan & Australia, the savings per year would be over \$1,000 and in Northern Europe, the average annual savings would be greater than \$1,300. Everyone knows there is a dollar value for the cost of energy. Why is it that lead acid battery manufacturers get let off the hook? They don't even bother to report RTE on their product specification sheets.

Discover AES LiFePO₄ batteries with MISER technology allows homeowners to store and utilize the solar energy they harvest from their panels with >95% efficiency. Compare that to the best case 80% RTE of new lead and 60% RTE of aged lead acid batteries, and you can give the inverter guys a break for a while.