

## Dow Kokam

### Technology Fact Sheet

**Innovating New Technology** Dow Kokam's advanced lithium polymer technology is the proven choice among OEMs and suppliers in the demanding automotive, industrial, defense and utility industries. From the next generation of electric vehicles, to unmanned military ground and air vehicles and high-end industrial products, Dow Kokam's robust lithium-ion technology sets the pace for advanced battery systems in today's critical applications.

**Dow Kokam's Lithium-ion Battery Technology and Patented Pack Design** Dow Kokam's lithium-ion batteries have significantly more energy for their size and weight than other types of batteries, such as the commonly-used lead acid and NiMH varieties. By storing up to three times more energy than nickel metal hydride batteries, currently used in most hybrids, Dow Kokam's batteries enable compelling advantages.

Its proven, patented technology provides customers with the advanced lithium-ion technology they need to succeed today and a robust multi-generational technology platform that has it well on its way to the next-generation technologies that will enable long term competitive advantage.

Dow Kokam has the unique capability to provide cell technology and pack capability as well, and it is the only battery manufacturer with proven system integration capability in transportation. Our advanced battery chemistry, innovative cell design and patented manufacturing processes, as well as cutting edge liquid cooling packaging technology offer significant advantages in terms of battery performance, including:

- Demonstrated Success in EV/HEVs
- Next generation technology due to Dow Kokam's multi-generational technology plan
- Safe low-impedance prismatic design
- Higher depth of discharge (greater than 80% in production EV)
- 10+ Years Operational Life
- Extended run time
- Integrated, patented battery management system for battery pack production
- Reduced need for complex cooling systems
- Operation over a wide range of temperatures
- Fast charge capability
- Highly automated manufacturing which contributes to affordable EV/HEVs

**Applications**

Our large-format cells have been in use for more than 10 years and our pack design and capability have been proven in more than 1 million kilometers of rigorous, on-the-road testing. That's why Dow Kokam's systems have gained the attention of the automotive, industrial, defense and utility industries.

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