StoreDot's XFC 4695 Cells Ready for Commercialization, Shipping to Global EV OEMs

StoreDot, with its partner Kumyang, moves from development to commercialization, shipping volume samples of its validated XFC 4695 cells to OEMs.

StoreDot Cylindrical Cells

HERZELIYA, ISRAEL, September 2, 2025 /EINPresswire.com/ -- StoreDot, the pioneer of extreme fast charging (XFC) battery technology, today announced the successful production of a large-scale batch of 4695 cylindrical cells in collaboration with its key partner, Kumyang. This achievement marks a significant milestone in the mass production of XFC technology, signaling that the company is on track to meet the long-awaited demand from electric vehicle (EV) manufacturers.

> This is a game-changer. We've proven our technology is scalable for mass production, moving from R&D to a commercialization company. Our OEM partners have been waiting for this moment."
> *Dr. Doron Myersdorf, StoreDot CEO*

The successful production run validated that all previously published specifications were met and even exceeded, demonstrating the scalability and readiness of StoreDot's XFC technology for high-volume manufacturing. For EV OEMs who have been closely monitoring the development of this game-changing technology, this is the pivotal moment they have been waiting for. The 4695 cells, produced at Kumyang's facility in Korea, achieved the extreme fast charging speeds and energy density targets that StoreDot had set out to prove, clearing the path for commercial adoption.

This achievement validates StoreDot's innovative XFC technology on a production scale, showing it can be integrated into existing manufacturing lines to produce high-performance cells that meet the stringent demands of the automotive industry. The 4695

format is a key part of the global transition to electric vehicles (EVs), and this milestone puts StoreDot at the forefront of this evolution.

A Strong IP Foundation: The XFC Shield™

StoreDot's XFC technology is protected by a strategic and growing family of patents, known as the XFC Shield™. This robust intellectual property portfolio covers the core components and intricate systems that make its industry-leading XFC technology possible. StoreDot is the sole holder of numerous patents that protect the proprietary silicon-dominant anode chemistry, advanced cell design, and specialized electrolyte formulations essential for achieving extreme fast charging without compromising battery life or performance. This strong IP position provides a secure foundation for partnerships and licensing agreements with global automotive OEMs and battery manufacturers, de-risking the path to mass production and ensuring a consistent and reliable supply chain for the world's most innovative battery technology.

Dr. Doron Myersdorf, StoreDot CEO

XFC Licensing Agreement for Cylindrical 46xx

4695 target specs

Parameter	Units	Value
Cell dimensions	mm	4695
Filling ratio (volumetric)	%	N.A.
Capacity (C/3)	Ah	38
Energy (C/3)	Wh	126
Specific energy	Wh/Kg	**282**
Energy density	Wh/L	**800**
Voltage window	V	2.5 – 4.2
Operating conditions	°C	-20 – 60
FChg 10-80%	-	**14min , 3C**
Standard cycling	cycles	>1000
FChg cycling 10-80%	cycles	>1500
FChg cycling 100% DoD	cycles	>1000

StoreDot 4695 spec

Key Specifications

Performance and Charging:

- Charging speed: Can add 100 miles (160 km) of range in about five minutes, or charge from 10% to 80% in just 10 minutes.
- Charging consistency: Unlike traditional Li-ion batteries, StoreDot's XFC cells maintain a fast charging rate across various states of charge without the typical slowdown at higher percentages.
- Cycle life: Lab tests demonstrate over 2,000 consecutive XFC cycles while retaining over 80% of

the original capacity, far exceeding industry benchmarks. The technology is designed to enable a battery warranty of over 500,000 km.

- Durability: The batteries show no accelerated degradation from extreme fast charging when compared to slow-charged cells.
- Cold weather performance: Delivers consistent discharge performance even in sub-zero temperatures. Can charge up to 80% at 14°F (-10°C) at standard speeds.

Cell Technology and Design:

- Anode chemistry: The cells use proprietary, silicon-dominant anodes to enable XFC without compromising energy density or battery longevity.
- Energy density:
  - Gravimetric energy density: Greater than 280 Wh/kg, with a roadmap to reach over 400 Wh/kg.
  - Volumetric energy density: At the stack level, the density is over 800 Wh/L.
- Form factor: While the successful production focuses on the 4695 format (46mm diameter, 95mm height), StoreDot's XFC technology is compatible with various form factors, including pouch, prismatic, and the 4680 cylindrical design.

About StoreDot

StoreDot is a global pioneer and leader of extreme fast charging (XFC) battery technologies. The company is revolutionizing the electric vehicle experience, breaking down the barriers to EV adoption with its "100-in-5" breakthrough – a battery that delivers 100 miles of range in just five minutes of charging. StoreDot's XFC technology is based on a unique design of silicon-dominant anode materials and is designed for a seamless transition into existing manufacturing lines. The company is on a mission to accelerate the transition to electric mobility with a vision of a cleaner, more sustainable future.

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