

# NanoFab Selects Hangang Mechatronics and SolarEdge UPS Solution for its Cutting-Edge Manufacturing Center

## / The Challenge

In 2018, with the continued growth in demand for Nanotechnology solutions, the National NanoFab Center (NNFC) based in S. Korea had been expanding its manufacturing capacity while maintaining its ongoing investment in developing new products using cutting edge Nanotechnologies. Such an increase in capacity and critical processes required a highly reliable power backup solution.

## / The Solution



Hangang Mechatronics, a SolarEdge Critical Power partner in Korea, together with SolarEdge, came up with the answer – four SolarEdge 300KVA modular UPS systems in parallel, providing 1.2MW of real online power back-up with Li-ion batteries.

Choosing this solution followed six months of reviewing multiple solutions from leading UPS suppliers. The review process was based on parameters that were defined in accordance with the highest requirements expected from an advanced Nanotechnology R&D and manufacturing facility.

## / Why Hangang Mechatronics and SolarEdge?

Hangang Mechatronics and SolarEdge were selected for this project by NanoFab because of the professional long-term support of Hangang Mechatronics and the following advanced SolarEdge UPS capabilities:

- **High reliability** – controlled manufacturing process with an advanced QA system
- **High power efficiency** – adjusts to the power that is needed, scalable with module level redundancy
- **Simple serviceability and easy to use** – hot-swappable, < 20kg modules – a single person can handle it; and includes a user-friendly control panel with remote monitoring capabilities
- **“Clean” power** – consistent regulated and stable harmonic free AC output waveform to the load
- **Support for Li-ion batteries** – LG Chemical Li-ion batteries were used for this project
- **Cost effective** – efficient, reliable solution with long-term maintenance service period

Since first installed in 2018, SolarEdge UPS systems have supported NanoFab advanced semiconductor manufacturing delivering a high level of reliability and efficiency.

## / About



National NanoFab Center, located in the Kaist complex at Yuseongu, Daejeon city, South Korea.

**National NanoFab Center (NNFC)**, established in 2004 by Kaist (Korean government organization), is Korea's top institution for Nano-infrastructure. NanoFab offers Nanotechnology (NT) equipment and facility process services to all kinds of users including education, research institutes and commercial industries. It provides NT education to students, researchers and experts with hands-on experience.

**Hangang Mechatronics Co. LTD.** established in 1976, is a local Korean manufacturer of standalone UPS systems up to 300KVA operating in the commercial, financial, industrial and government market segments. Hangang Mechatronics has been selling and servicing SolarEdge Critical Power Division (previously known as Gamatronic) modular UPS systems since 2009.

## / About SolarEdge Critical Power Division

The Critical Power Division of SolarEdge (NASDAQ: SEDG) delivers innovative products and solutions that power IT and machines across a broad range of sectors, among them telecom, manufacturing, healthcare, government, finance, academic, research and transportation. Facility owners, IT managers, system integrators and consultants all over the world, rely on us for the most reliable critical power solutions that are simple to use and reduce the total-cost-of-ownership. With the accelerating demand for data and always-on communications, we have been powering data centers, server rooms, medical imaging, operating theaters, control centers, laboratories and production lines all over the world for over five decades.

