

CASE STUDY

*Automotive Parts Manufacturer Chooses
PLW Series of Electronic Loads for Fuel-Cell Test*

► Background

An automotive parts manufacturer based in Asia anticipates a future of fuel-cell electric vehicles (FCEVs) that emit zero toxic pollution—only water. The company is even looking beyond the automobile. In addition to making automotive modules, core parts, and aftermarket service parts as well as converters for battery-electric automobiles, the company is investigating hydrogen fuel-cell technology for trains, vessels, logistics equipment, and even emergency power generators.



► The Challenge

The company's key product in fuel-cell area is the membrane electrode assembly (MEA), which can be stacked and combined with other components and systems including a hydrogen tank, frame, fuel-processing system, power junction box, DC/DC converter, high-voltage battery, thermal-management system, and air-processing system to form a complete fuel-cell power pack. Target applications range from a fuel-cell forklift that can be recharged in five minutes to a hydrogen emergency power generator with a modular design that can operate in extreme conditions. The manufacturer requires programmable electronic loads to pursue these applications.



► The Solution

The manufacturer chose the water-cooled PLW Series of programmable electronic loads from AMETEK Programmable Power, including a PLW6K-60-1000 unit (with a rating of 6kW, 60V, 1,000A), a PLW6K-120-600 model (6kW, 120V, 600A), and a PLW12K-60-1500 unit (12kW, 60V, 1,500A). Through the efforts of AMETEK Programmable Power's distributor network to maintain excellent relationships in the region, AMETEK Programmable Power has emerged as the preferred choice for electronic loads and other programmable power supplies. The customer uses many other AMETEK Programmable Power supplies in addition to the PLW electronic loads and has experienced strong after-sales support. AMETEK Programmable Power's PLW Series electronic loads offered two key selling points that drove the sales win: product reliability, with features like Individual FET protection minimizing mean time to repair (MTTR), and power density, with the 6kW and 12kW models that the customer chose fitting into 2U, 27.5-in.-deep chassis.