



Press release 15 November 2022

EA Elektro-Automatik announces a power density breakthrough with its new Industrial Series 60 kW DC Power Supplies and Loads

Germany (Viersen), November 15, 2022 – EA Elektro-Automatik GmbH & Co.KG, a worldwide manufacturer of DC power supplies for R&D and manufacturing, introduces its 60 kW and 30 kW, EA-PU 10000 Programmable DC Power Supplies, EA-PUB 10000 Programmable Bidirectional DC Power Supplies and EA-PUL DC Programmable Regenerative Electronic Loads. Typical applications include electric vehicle battery pack testing, powering furnaces in semiconductor wafer fabrication facilities, electrochemical electrolysis processing, and solar inverter testing. The new products, without manual front panel displays, are intended for use in production ATE systems and automated process control systems requiring high power.

The 60 kW models output maximum voltages of 360 V to 2000 V and maximum currents of 480 A to 80 A; the 30 kW models output maximum voltages of 60 V to 2000 V and maximum currents of 1000 A to 40 A. Overall, the 60 kW series includes 21 models, and the 30 kW series consists of 29 models allowing engineers to select a model that addresses their specific applications. The increased power capability enables engineers to reduce the number of power instruments needed for a high-power system, saving critical rack space and providing more power in a smaller footprint.

With 60 kW in one 6U enclosure and 30 kW in a 4U enclosure, EA Elektro-Automatik offers the highest power density available. Markus Schyboll, CEO of EA Elektro-Automatik, comments, "With the new 60 kW and 30 kW industrial series instruments, EA Elektro-Automatik provides space-saving, cost-effective solutions with priority on both safety and the lowest cost of ownership. All our models have overcurrent, overvoltage, overpower, and overtemperature protection functions, and our new bidirectional power supplies and regenerative electronic loads have power factors of 0.99 and return up to 96% of absorbed power back to the grid."

Enables systems with capacity up to 3.84 MW

Test engineers can parallel up to 64 of the 10000 series power supplies and loads using the Master and Auxiliary bus (formerly known as Master-Slave-Bus) to enable one instrument to control all instruments in the system which can be paralleled up to 3.84 MW. The system can consist of any combination of instrument models within the EA 10000 series family. A galvanically isolated Share-Bus interface in each instrument ensures that all the instruments safely share the load requirements so that no instruments in the system are overloaded.

Saves instrument cost and rack space

A capacity of 60 kW in one enclosure enables engineers to reduce the number of power instruments needed for a high-power system saving both substantial capital costs and critical rack space. In addition, the elimination of a front panel display further saves capital equipment costs.

Saves test development time with seamless operation among all models

All 10000 series instruments operate on the same firmware and have similar input and output characteristics. The common programming and user interface saves test development and setup time when building test and control systems requiring multiple power instrumentation.

Access greater voltage and current capacity in one device with True Autoranging

All 10000 series instruments employ an autoranging output (input if an electronic load) characteristic. Autoranging enables the instrument to have a higher voltage capacity at lower currents and a higher current capacity at lower voltages than a power supply or load with a conventional rectangular output/input



characteristic. Furthermore, an instrument with autoranging output/input can deliver/accept full power output over a significant portion of the instrument's operating range. This is in contrast with an instrument with a rectangular output characteristic which has maximum power only at its maximum voltage and current. Unlike competitive units that offer an autoranging feature, the benefit of EA's true autoranging capability for a test engineer is access to a wider range of voltages and currents, enabling the engineer to test more devices without the need for more instruments.

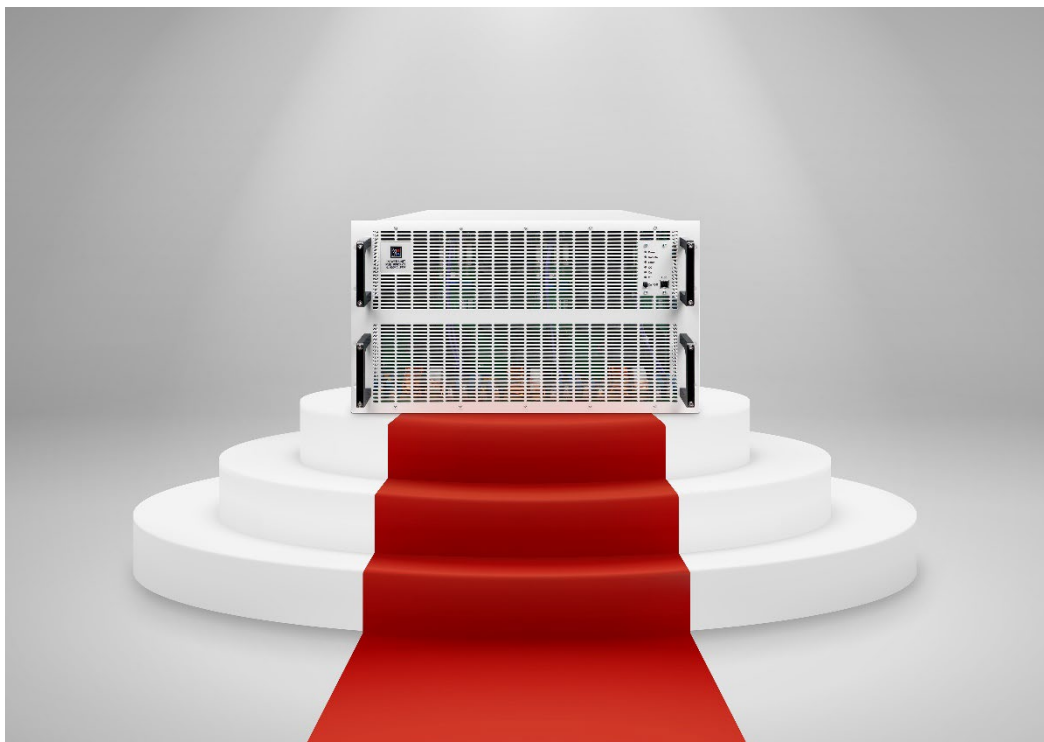
Simulates power devices and creates AC + DC signals with optional built-in arbitrary waveform function generator

The EA-PU power supplies, EA-PUB bidirectional power supplies, and EA-PUL electronic loads are available with an on-board full function generator (software option) to create complex signals riding on a DC bias and simulate the characteristics of various devices such as solar cells, batteries, and fuel cells. Special functions enable maximum power point tracking (MPPT) and EN 50530 solar panel inverter testing, and LV123-, LV124-, and LV148-standard based test sequences for testing of automotive components and systems. The optional function generator simplifies the task of simulating various devices and creating sequences of outputs (or inputs) to comply with key test standards by eliminating the need for external waveform generation instrumentation to safely interconnect with an EA Elektro-Automatik instrument.

Communicates easily with PCs and Programmable Logic Controllers (PLCs)

The 10000 series instruments work effectively in either PC-controlled test systems or PLC-controlled industrial processes. Engineers can easily program the instruments using SCPI or ModBus programming modes. The 10000 series instruments have an extensive set of galvanically isolated interfaces. Standard interfaces include Ethernet, USB, and analog, while optional interfaces include CAN, CANopen, RS-232, Profibus, ModBus, Profinet, and EtherCat.

For more information on the 10000 Industrial Series, go to www.elektroautomatik.com/industrial-series





Elektro-Automatik

Pure & Powerful: The new EA-10000 Industrial Series with 60 kW in 6U and up to 300 kW in a single rack. Powerful efficiency for high-power applications.

About EA Elektro-Automatik

The EA Elektro-Automatik Group (EA) is Europe's leading supplier of power electronics for R&D and industrial applications.

At the German headquarter in Viersen, North Rhine Westphalia, more than 300 qualified associates research, develop and produce high-tech equipment for laboratory power supplies, high power mains adaptors and electronic loads, with and without mains feedback. Specific to power electronics, made by EA, is the wide application spectrum. The units are used across many branches, from batteries, through fuel cell technology, to wind and solar power, from electrochemicals and process technology to telecommunication.

Results and experience from decades of R&D flow continually into new solutions. Automatic test systems with specially developed soft- and hardware assure a consistently high product quality. Flexible production processes support fast reaction to changing customer requirements.

As a mid-size company EA is totally responsible for the production location in Germany but acts globally with branches in China and USA, a sales office in Spain and a wide network of partners. Value sharing, mutual respect and open communication characterize our organization.

The foundation of the company in 1974 was based on innovation, a tradition which is maintained today. What started with the development of simple mains adaptors is continued today in the overall concept of technology leadership. With highly specialized power supply systems for a multitude of applications, EA is driving the future of power electronics – technologically excellent, designed for resource protection and energy saving and conceived for a multitude of applications.

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