Programmable Regenerative DC Power Supplies Address Industrial And Scientific Applications

REGATRON's G5.RSS series programmable regenerative dc power supplies feature high control dynamics, high accuracy, a nominal output voltage of up to 3000 Vdc, and a wide current-voltage range with an auto-ranging factor of 3. The modular and finely graded G5.RSS series is bidirectional regenerative and can operate in CV, CC, CP, CR, and Ri-Sim control modes (see the figure).

The power supplies are universally applicable and therefore suitable for all industrial and scientific applications in laboratories as well as on test benches and production lines. Adjustable filter time constants, optional software, programming and communication interfaces as well as safety functions allow the G5.RSS power supplies to be optimally adapted to the customer application requirements.

The power output of an individual power supply is in the range from 0 to 18 kW up to 0 to 2000+ kW with output voltage up to 3000 Vdc. The modularity of REGATRON power supply solutions allows the system to be easily adapted to ever-changing test requirements. Not only is it possible to reconfigure between parallel, series, and mixed operation, but also to expand the system with additional power supply units or to split it into smaller units.

Adjustable controller settings and the integrated eight-channel digital scope assist the user to easily achieve optimal system behavior. The G5.RSS series offers the possibility to store, edit, and recall any device configuration on board the power supply.

The G5 family includes both universal, programmable dc power supplies as well as power supply solutions for specific applications (see the table). For more information, see the product announcement and product series description.

Figure. Suitable for a wide range of industrial and scientific applications, REGATRON's DC Generation 5 programmable regenerative dc power supplies are technologically advanced, fast switching, compact 19-inch power supplies that feature control dynamics in the 100- to 200-µs range, even at higher power levels. They also exhibit exceptional current accuracy of <0.02% full scale, with additional high-resolution current measurement range. The power output capability of an individual power supply ranges from 0 to 18 kW up to 0 to 2000+ kW, with output voltage up to 3000 Vdc.

Table. Universal and application-specific options within the G5 power supply family.

Universal power supplies series	Application-specific power supplies series
G5.RSS Programmable Regenerative DC Source Sink G5.SRC Programmable DC Power Supply G5.RLD Regenerative DC Electronic Load G5.UNV Universal Regenerative DC Source Sink	G5.BT Battery Tester G5.CT Charger Tester G5.DT Drivetrain Tester G5.SAS Solar Array Simulator G5.BS Battery Simulator

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