Modular DC electronic load designed for multi-channel DC source testing

B&K Precision announced its new MDL Series, a modular programmable DC electronic load system. The MDL Series comprises six unique modules ranging in power from 200 W to 600 W. Any combination of these modules can be installed for multi-channel operation in the 4-slot MDL Series mainframe, which supports up to 2400 W and up to 4800 W with a mainframe extension connected. Suitable for use in industries such as automotive, solar, and electronics manufacturing, this high performance DC electronic load system is designed for characterizing a wide range of DC power sources, including multi-output AC/DC power supplies, batteries, fuel cells, and photovoltaic arrays.

All DC load modules in the MDL Series can operate in constant current (CC), constant voltage (CV), constant resistance (CR), constant power (CW), and constant impedance (CZ) mode, which uses DSP technology to simulate realistic non-linear loading behavior. Depending on the module, users can select from operating voltage and current ranges up to 500 V and 120 A. A 250 W dual-channel module supporting flexible power allocation up to 300 W is also offered. Load modules in the MDL Series mainframe can be synchronized and connected in parallel for increased current and power.

With its high resolution 16-bit measurement system, the MDL Series system supports many useful features such as adjustable current slew rates in CC mode,

transient mode operation up to 25 kHz, and list mode programming for generating complex sequences of input changes. Up to 101 groups of settings parameters can also be saved for executing multiple test sequences in automatic production testing.

For remote PC control, the MDL Series mainframe offers standard GPIB, Ethernet, USB, and RS232 interfaces supporting USBTMC and SCPI communication protocols. The mainframe also offers a built-in 8-pin control terminal for external triggering and synchronous load On/Off functions. Each module includes an analog current control and monitoring terminal for external analog programming.

Additionally, the MDL Series provides all necessary protection functions for various testing conditions: overvoltage (OVP), overcurrent (OCP), overpower (OPP), overtemperature (OTP), and local and remote reverse voltage (LRV/RRV) protection.

Available immediately, B&K Precision's MDL Series mainframes and modules can be ordered at the prices listed below and are all backed by a standard 3-year warranty.

MDL001 -- 4-Slot Mainframe -- $1,625

MDL002 -- 4-Slot Mainframe Extension -- $1,250

MDL200 -- 80V/40 A/200W Load Module -- $1,085

MDL252 -- 80V/20A/250W 2-Ch* Load Module -- $2,045

MDL305 -- 500V/20A/300W Load Module -- $1,785

MDL400 -- 80V/60A/400W Load Module -- $1,615

MDL505 -- 500V/30A/500W Load Module -- $2,795

MDL600 -- 80V/120A/600W Load Module -- $2,415

*MDL252 is a dual-channel module supporting a unique flexible power configuration. The user can allocate 250 W to either channel up to 300 W total (e.g. 50 W/250 W, 250 W/50 W, 150W/150 W).

For additional technical specifications, accessories, and support documents, visit: http://www.bkprecision.com/products/dc-electronic-loads/MDL001-programmable-dc-electronic-load-mainframe.html [1]

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