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Home / Tech / Green Tech

Modern Atomics Launches with Energy-Saving PDU for Motorized Window Shades

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Technology innovators Paul Bryson, Tim Marshall, and Michael Braithwaite – known for their roles in launching NetStreams and key posts at AMX, ClearOne, Crestron and Screen Innovations – have formed a new company, Modern Atomics. At CEDIA Expo 2024, Modern Atomics will debut their first product, Reaktor, which is the industry's first power distribution unit (PDU) designed specifically for motorized shades.

Leveraging patent-pending technology developed by Modern Atomics, one Reaktor can power up to 22 shades (where other PDUs max out at eight) yet eliminates up to 99.75% of all the quiescent current, saving up to 412 Kilowatt-hours yearly. (Quiescent current is current that flows in a system in standby mode with a light or no load.) A built-in ammeter on the unit's front shows in real-time how much quiescent current is being saved for all shades.

MSRP for Reaktor is \$1,499, which includes a passive PoE injector, rack/shelf mounting provisions, and a transferable 10-year warranty. The unit is powered via the provided passive POE injector or a Somfy 24V inline BUS power supply, and in turn drives each of the shades via Cat-5 cable and RJ45. As a novel design touch, Modern Atomics has printed important details from the product's manual to the bottom of Reaktor, including all of the pin outs and programming instructions (see photo below).

"At just \$68 per motor port, Reaktor is one-half the cost of today's PDUs," said Modern Atomics Chairperson and Co-Founder Michael Braithwaite. "And its 1.75"x 8.5" footprint saves as much as 60% of rack space or 80% of wall space. Additional setup conveniences include an auto-programming feature and, for larger systems, a copy-and-paste system. All of this comes together in eliminating the need for a licensed electrician and conduit and cutting project deployment time and costs by 50%."



Reaktor is compatible with Somfy motors, the most-used brand in indoor and outdoor shades. This includes Screen Innovations, Draper, BTX, Corradi, Sol-Lux, Spring Blinds, Clara, Alta, Universal Window Coverings, Peachtree, Graber, and SunSetter. Reaktor works with all major control systems, including Control4, Crestron Home, Crestron SIMPL, Elan, URC, RTI, and Bond Bridge Pro.

"Today's PDUs for shades use generic power supplies that fall short," said company Co-Founder and Chief Technology Officer Paul Bryson. "Our high-tech CEDIA channel pros and their clientele deserve so much more. Invented, designed, and built from the ground up by Modern Atomics, Reaktor gives CIs a significant competitive advantage in winning more job bids."

Independent manufacturer sales rep partners on board include Phoenix Marketing Group (East Coast); AV Partners (So Cal, So NV, AZ, HI); Elite3 Pro (TOLA); Performance Plus (Rocky Mountains); Savvy Sales & Marketing (Midwest); The Press Agency (Western Canada), and Ebony TriStar (Eastern Canada).

"With Reaktor, our dealers can get in and out of motorized shade projects faster and without the potential complexities or aggravation associated with how this was done in the past," said Chris Gilray, president of Phoenix Marketing.

At CEDIA Expo 2024 Reaktor can be experienced at Modern Atomics booth (#3520), and at the booths of Screen Innovations (#1928) and Bond (#4109). On Friday Sept. 6, 3-4:30 PM (room #111), Modern Atomics is hosting a session called: "Advanced Motorized Shading, Cut Costs and Deployment Time in Half and Lower Power Consumption by Up to 99.75%." The class will also include training by Bond.

Reaktor is the first of a new generation of new products to come from Modern Atomics.

Co-Founder and Chief Financial Officer Tim Marshall says that in 2025 the company will expand their energy savings capabilities to other AV sub-systems like lighting, audio distribution, and video walls.

"We will also introduce the first AV wireless mesh, which allows users to use any AV device with any other AV devices, with no more pairing and unpairing, and the first wireless DSP engine for mixing, stitching, and routing aided by our EdgeAI processing," Marshall said.

Reaktor ships September 2024. Complete specs are available here: <https://modernatomics.com/reaktor>

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