

New Point of Load DC-DC Power Converter Delivers 20A for Military-Avionics Systems

VPT Inc., a HEICO company expanded its line of point of load (POL) DC-DC power converters with the introduction of a new 20A module. The DVPL0520S is a non-isolated, synchronous, regulated buck converter that steps down power at the point of use with up to 90% efficiency.

With modules now ranging in output from 3A to 20A, VPT is the only manufacturer to provide power designers with a complete set of POL DC-DC converters that are specifically designed for use in rugged military and avionics power systems.

“Our point of load converters provide power with efficiencies typically greater than 90% plus typical weights of less than 16 grams in true hermetic packaging. This provides power designers with an extremely small, extremely efficient, and extremely reliable set of converters with which to distribute power to the point of use on an aircraft, in a military vehicle, or any other rugged duty system,” explained Michael J. Bosmann, Sr. Vice President of VPT.

The DVPL 20A module can be used alone or in conjunction with multiple POL DC-DC converters all powered from a single isolated high power DC-DC converter, such as VPT’s 50W DVHE Series. Specifications include:

- Up to 20A (66W) power output
- User adjustable output voltage from 0.8V to 3.4V
- Operates from 5V nominal input
- Up to 90% efficiency
- Fault tolerant design with magnetic feedback - no optoisolators
- Output inhibit control
- Very low output noise
- Tiny size - 1.075" x 1.075" x 0.270" and light weight (16g max)
- Over current and short circuit protection
- Wide case temperature operating range of -55 °C to +125 °C with full performance
- Environmental screenings available, including MIL-PRF-38534
- Meets MIL-STD-461C and MIL-STD-461D EMC requirements when used with VPT DC-DC converters and EMI filters
- Manufactured in a facility qualified to ISO-9001 and certified to MIL-PRF-38534 and MIL-STD-883
- A component of the High Efficiency, Reliability Optimized (HERO) distributed power system offered by VPT.

The DVPL0520S is available immediately at a price of \$215.32 per unit in OEM quantities.

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For a datasheet, technical product overview video, efficiency diagrams, and additional product information, please visit the VPT website at www.vpt-inc.com [1].

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[1] <http://www.vpt-inc.com>