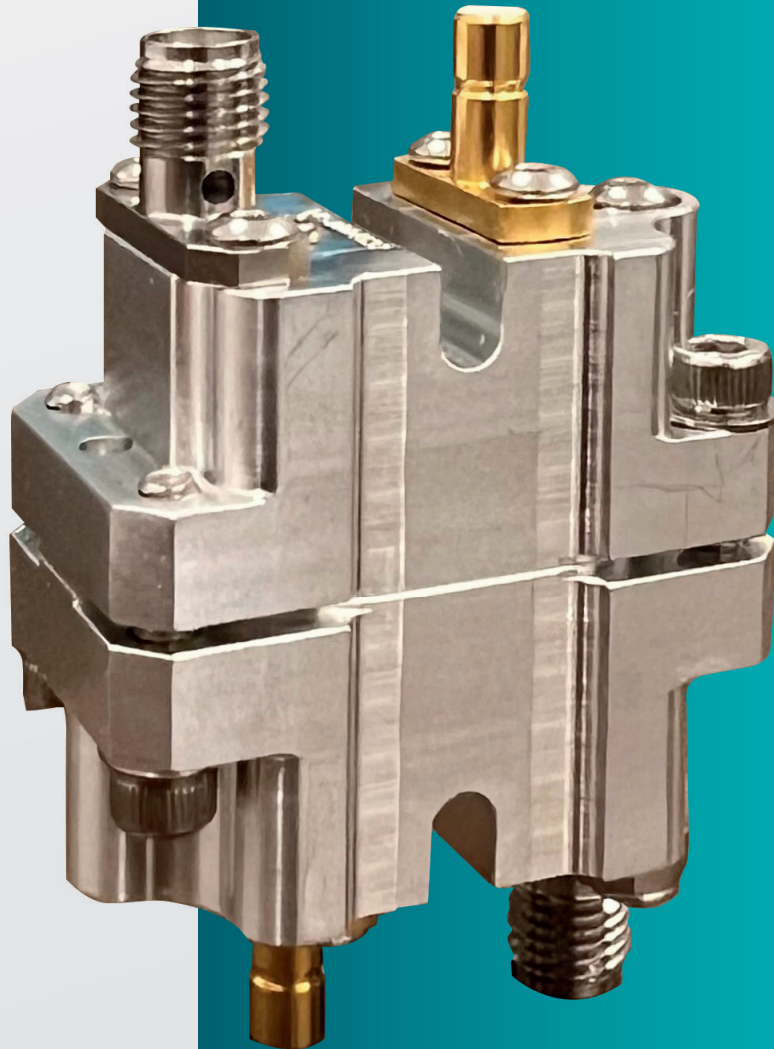


# PINACLE

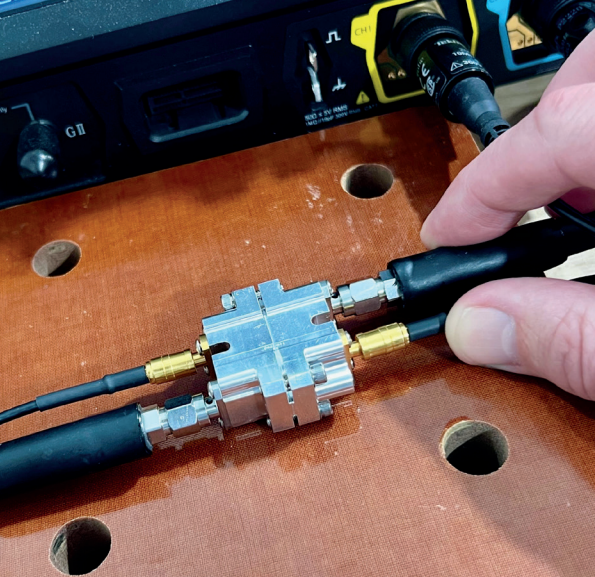
Plasma-based **IN**line **A**ctive  
Cavity **L**imiter with **E**lectronic-tuning

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HIGH POWER RF PLASMA SWITCHING AND PROTECTION



CREATING SOLUTIONS THAT MATTER



# PINACLE

Plasma-based **IN**line Active  
Cavity Limiter with  
Electronic-tuning

HIGH POWER RF PLASMA  
SWITCHING AND PROTECTION

## KEY FEATURES

- Electronically tunable RF limiter
- Active RF switching
- Tested to MIL-STD-202
- Ultra-compact, plasma limiter in ruggedized connectorized form-factor for rapid installation
- Fast turn on time with large hold-off threshold

## SYSTEM USE CASES

PINACLE (S-band) is optimized for passive RF protection aboard hypersonic platforms, isolating sensitive electronics from antenna systems. Available active control of PINACLE enables its use as an RF switch, making it an attractive solution whenever high RF power handling is required in a compact form factor.

PINACLE is an electronically tunable, high-power RF protection switch for aerospace environments. Integrated Compact Plasma Discharge Cell (CPDC) technology makes PINACLE faster and more compact than a waveguide receiver protector, enabling better power handling than a semiconductor diode limiter. CPDCs operate with or without external bias for switching and attenuation control.

## KEY PERFORMANCE SPECIFICATIONS

SPECIFICATIONS	VALUE
Frequency	S-band (tunable to other frequency bands)
Insertion Loss (IL)	0.98 dB
Bandwidth	12%
Power handling	<ul style="list-style-type: none"> <li>• 150 W continuous</li> <li>• &gt; 1.3 kW pulsed</li> </ul>
Limiter threshold	30 dBm
IL when active	Up to 50 dB
Size	1 in <sup>3</sup>
Connector	SMA

## CONTACT INFORMATION

J. Mark DelGrande, Ph.D.  
[j.mark.delgrande@verusresearch.net](mailto:j.mark.delgrande@verusresearch.net)

