

# PINNACLE® PLUS+ HALO PULSED-DC POWER SUPPLIES

Advanced Pulsed-DC Control for Low-Power Applications



AE has optimized the proven Pinnacle® Plus+ topology to allow precise process control at low powers, while providing signature pulsed-DC performance. To suit an array of applications, Pinnacle Plus+ HALO (high accuracy, low output) power supplies are available in both single- and dual-output configurations.

## PRODUCT FEATURES

- High accuracy at low power – as low as 10 W
- Selectable to run at variable pulse frequency 5 to 350 kHz or straight DC
- Precise process control

## BENEFITS

- Stable at low pressure
- No tap changes
- Output repeatability of  $\pm 0.1\%$

## APPLICATIONS

### Market Applications

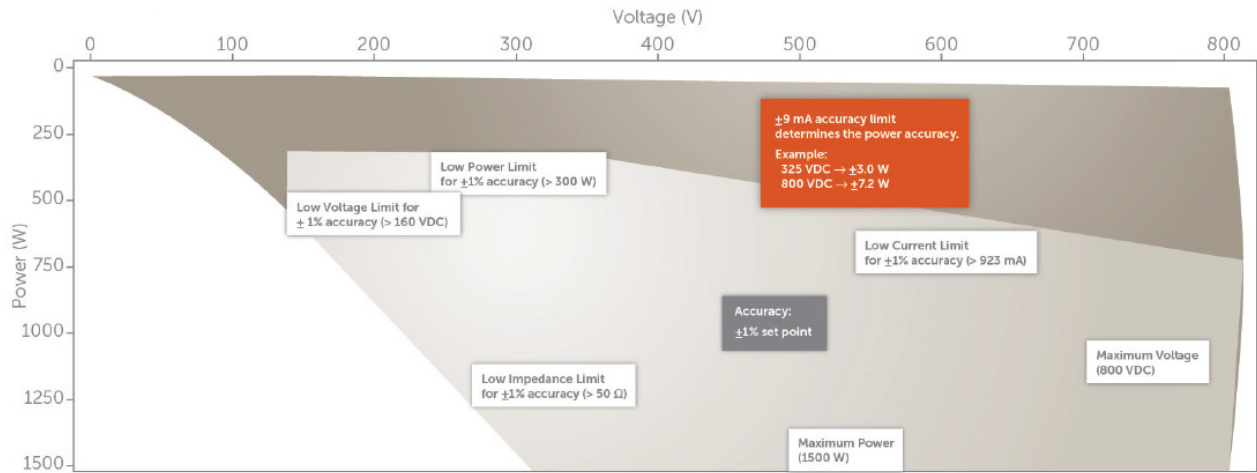
- Semiconductor
- Solar
- Flat Panel Display
- MEMS Manufacturing
- Industrial

**BASIC SPECIFICATIONS**

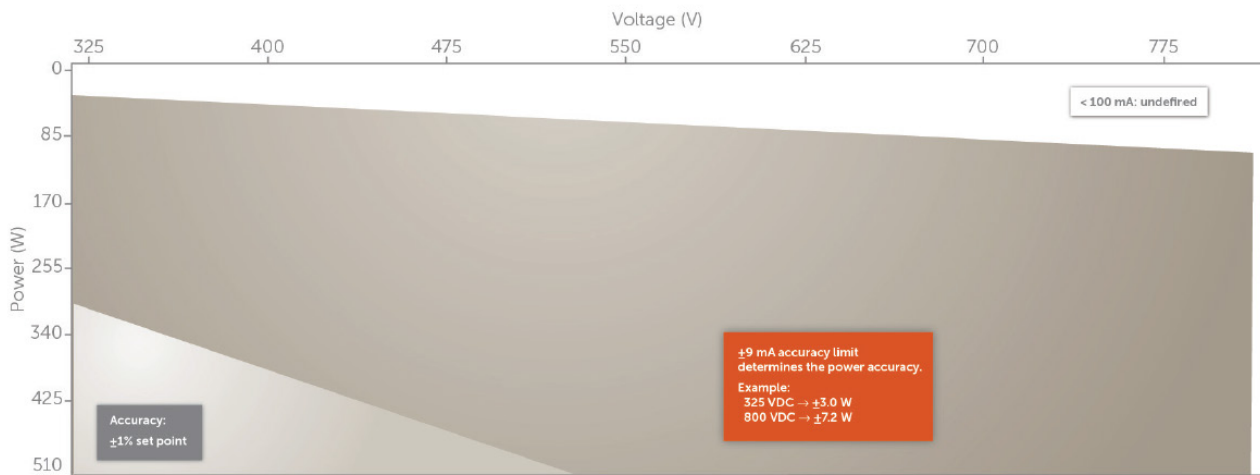
Output	
Max Power	1500 W per channel
Min Power	20 W
Max Voltage	800 VDC
Min Voltage	25 VDC
Max Current	4.6 A
Min Current	100 mA
Ignition and Pulsing	
Ignition	1400 V (pulsed)
Pulsing	5 kHz to 350 kHz
Input	
Voltage	208/400 VAC
Current	7 A (single output), 13 A (dual output) nominal per $\theta$ (at full 3 kW output)
Physical	
Dimensions (Overall)	19.00 in (482.60 mm) x 5.22 in (132.6 mm) x 22.71 in (576.7 mm)
Output Connector (Selectable)	UHF, P16, P11 connector
	2-pin pluggable connector
	MS 3470 (military-style) connector
Input Connector	Five terminal DIN compression block
I/O Communications (Selectable)	
Active Front Panel	Optional
Serial	AE Bus (RS-232/422/485) or Profibus®
Analog	37-Pin 15 VDC (digital), 0 to 10 VDC analog
	37-Pin 24 VDC (digital), 0 to 10 VDC analog
	15-pin 15 VDC (digital), 0 to 5 VDC analog (limited)

ACCURACY

Overall Accuracy



Accuracy Detail (< 500W)





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## ABOUT ADVANCED ENERGY

Advanced Energy (AE) has devoted more than four decades to perfecting power for its global customers. AE designs and manufactures highly engineered, precision power conversion, measurement and control solutions for mission-critical applications and processes.

AE's power solutions enable customer innovation in complex semiconductor and industrial thin film plasma manufacturing processes, demanding high and low voltage applications, and temperature-critical thermal processes.

With deep applications know-how and responsive service and support across the globe, AE builds collaborative partnerships to meet rapid technological developments, propel growth for its customers and power the future of technology.

PRECISION | POWER | PERFORMANCE | TRUST

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