AT5g8Gen200



AT5g8Gen200 is a precision, solid-state microwave generator, designed for use in RF energy systems.

Applications

Microwave heating, drying and curing; industrial, scientific, medical; microwave excited plasmas

Key features:

- ISM 5.8GHz band, 200W, CW, PWM and pulse operation
- Precise power, frequency, phase and timing control
- High frequency stability and high PA efficiency (GaN HEMT transistors)
- Temperature monitoring and protection
- Forward and reflected power measurement and load mismatch protection
- Local control via graphical user interface
- User interaction via touchscreen and human interface devices
- API based remote control via USB and Ethernet ports
- Applicable as a stand-alone generator, or as a building block (including the controller function) in larger, coherent MW energy systems

AT5g8Gen200 Specification

Electrical specification		Mechanical specification					
Frequency range	5725 to 5875MHz	Operating temp.			25±5°C		
Frequency stability	±10Khz	Output RF connector			N- type		
Output power	33 to 53dBm	Dimensions			19" rack, 4U high		
Pulse condition	CW, PWM and pulse	Weight		<18kg			
	Pulse width>5µs	Home	Frequ	uency Tune	Frequency S	weep Settings	Power
PWM frequency	<10kHz						
AC supply	100-240VAC <i>,</i> 50/60Hz	Frequency (MHz):	5800	Power (dBm):	53	AT5g8GEN	1200
Power consumption	<800VA	Phase (°):	0	Power (W):	199.53	Andiva M	Tech
		Frw. Power:	RF is Refl. Pov	S ON	l. Coef.:	Temperature: Status: -	33.4 °C



24.4 %

CW

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February 2021

194.5 watt

47.4 watt

PWM Freq. Tune



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Besides the basic generator's settings, the GUI offers (optional) access and control algorithms – frequency sweep and automatic frequency tuning vs load variation, which are essential in the characterization phase and for the efficient operation of the RF energy systems.

The IN/OUT signals, required for synchronization of the operational parameter of multiple generators, are provided via dedicated connectors, accessible on AT5g8Gen200's back panel.



AT5g8Gen200 back panel

AT5g8RF200

AT5g8RF200 is a compact "case-less" version of AT5g8Gen200, developed for cost and size optimized applications. AT5g8RF200 features the complete RF functionality and performance level of AT5g8Gen200. It can be controlled from another AT5g8Gen200's graphical UI, and using external power combiner, the unit would double the MW power, delivered by the generator.

AT5g8RF200 can also be used as a standalone unit, controlled via API by external host or controller.



OPTIONAL FEATURES

 for applications, requiring an extended detection range of forward and reflected powers, both AT5g8Gen200 and AT5g8RF200 can support the detection of the RF signals, provided by an external directional coupler.

for applications, requiring an extended temperature range, both AT5g8Gen200 and AT5g8RF200 can be delivered in water cooled implementations.
on request, AndivaTech can offer appropriate power combiners and directional couplers.

AT5g8RF200 Specification

Mechanical specification				
Dimensions	330x220x150mm			
Weight	<8kg			

Specifications are subject to change without notice.

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February 2021