

Microwave + Millimeter wave POWER SUPPLY

Components



Solid State Signal Source



Pulse Generator for
Microwave Modulation



TWT Amplifier

The Microwave/Millimeter-wave Power Supply has a frequency range of 2GHz to 30GHz, and can deliver 650W output power. This power supply consists of a high power amplifier*, a solid-state signal source and a pulse generator for microwave modulation. It has excellent stability in output power and allows variable frequencies and pulse modulation. It can be utilized for various industrial applications and researches such as ECR plasma and accelerators.

*A TWT amplifier or a solid-state amplifier can be chosen.

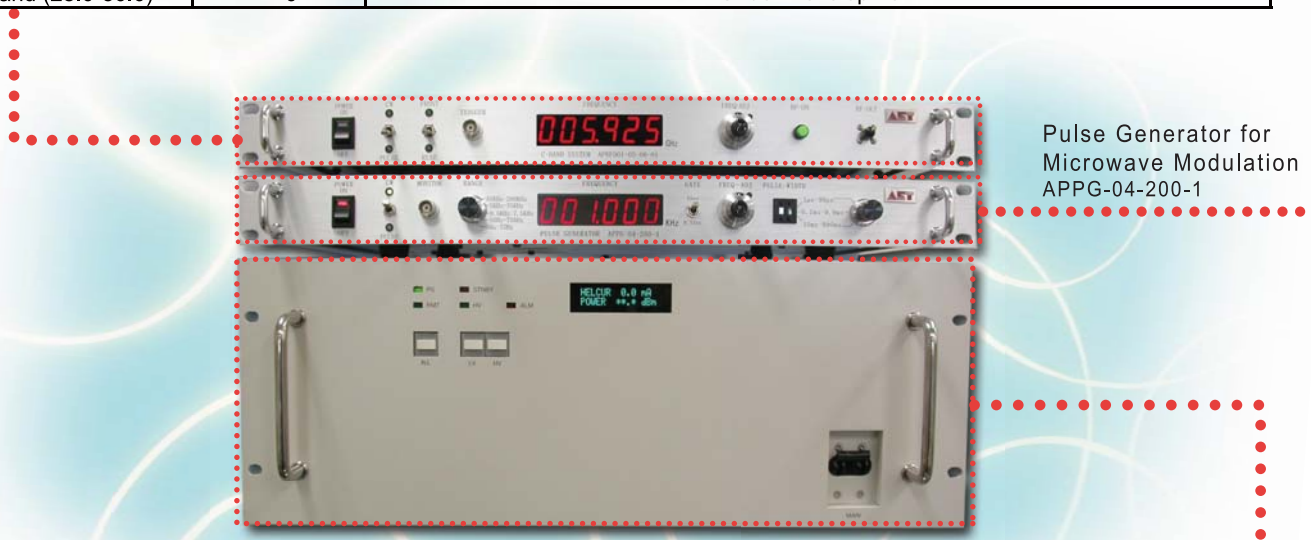


AET, Inc.

The solid-state signal source has excellent stability in frequency and output power. By combining it with a pulse generator for microwave modulation, it allows control of the microwave output with pulse width from min.1µs to any value within the range.

Solid-state Signal Source APRF001-Bandwidth

Frequency Bandwidth (GHz)	Output Power (dBm)	SSB Phase Noise (dBc)	Frequency Drift (MHz/°C)	Harmonics (Oscillator Output)				
				1/2 (dBc)	2nd (dBc)	3/2 (dBc)	5/2 (dBc)	3rd (dBc)
S-band (2.35-2.55)	< 10	-114	0.3	—	-5	—	—	-15
C-band (5.85-6.45)	< 10	-110	0.8	—	-10	—	—	-20
X-band (7.8-8.7)	< 10	-103	0.85	—	-16	—	—	-28
Ku-band (14.0-15.0)	< 10	-105	1.5	-20	-30	-12	-40	—
Ka-band (28.0-30.0)	< 0	Under Development						



Pulse Generator for Microwave Modulation APPG-04-200-1

This compact amplifier is composed of all solid-state components. It has excellent stability and is economical without the need for replacement parts.

Solid-state Amplifier APRF100-04-2450

Frequency Bandwidth (GHz)	Power Amplifier Output(W)	Gain(dB)	Input(VAC)	Input Power (kVA)
S-band (2.35-2.55)	>100	>50	100	0.3

This reliable TWT amplifier is long-lasting and is used as an essential component for communication systems.

TWT Amplifier

Frequency Bandwidth (GHz)	Power Amplifier Output(W)	Gain(dB)	Input(VAC)	Input Power (kVA)
C-band (5.85-6.425)	>650	>70	200	2.5
X-band (7.9-8.4)	>650	>70	200	2.5
Ku-band (14.0-14.5)	>650	>70	200	2.5
Ka-band (27.5-30.0)	>150	>65	100/200	0.85

