

PULSE POWER AMPLIFIERS

0.8 GHz to 2.5 GHz

Up to 10 KW output power



USER BENEFITS

- ✓ High power, high and flat gain
- ✓ Solid state amplifiers
- ✓ High VSWR operation
- ✓ High reliability
- ✓ Wide RF bandwidth
- ✓ Low harmonic distortions
- ✓ Worldwide services

AREAS OF APPLICATION

- ✓ EMC tests
- ✓ Radar systems
- ✓ Communications (CDMA,W-CDMA,GSM...)
- ✓ TWT replacement
- ✓ Particules accelerators

MAIN CHARACTERISTICS

- ✓ SSPxG-0.8G2.5-x Models are self-contained, forced air cooled (Water cooling on W option), broadband GaN amplifiers
- ✓ The front panel digital display shows forward and reflected pulsed power and system status information's.
- ✓ Standard features include a built-in IEEE-488 and Ethernet interface.
- ✓ Standard 19"
- ✓ Operating temperature 0°C to 35°C (-10 °C to 50°C on T option)
- ✓ Storage temperature -10°C à 50°C (-20 °C to 70°C on T option)
- ✓ Humidity until 95% (non-condensing)

OVERVIEW			
Model	Rated Power (*)	Pulse width	Duty cycle
SSP1-0.8G2.5-A	1 kW	0.1-100 µs	5 %
SSP2-0.8G2.5-A	2 kW	0.1-100 µs	5 %
SSP5-0.8G2.5-A	5 kW	0.1-100 µs	5 %
SSP10-0.8G2.5-A	10 kW	0.1-100 µs	5 %

(*): Minimum mean power in the pulse, measured on 50 Ohms load, VSWR < 1.3:1

SPECIFICATIONS				
	SSP1-0.8G2.5-A	SSP2-0.8G2.5-A	SSP5-0.8G2.5-A	SSP10-0.8G2.5-A
Pulsed saturated output power				
Minimum (Watts)	1 000	2 000	5 000	10 000
Typical (Watts)	1 200	2 400	5 600	11 500
Mini.@3dB compression (Watts)	900	1 800	4 500	9 000
Mini.@1dB compression (Watts)	700	1 400	3 500	7 000
Input for rated output (dBm)	0	0	0	0
Instantaneous frequency response (GHz)	0.8 -2.5			
Gain (dB)	60 min	63 min	67 min	60 min
Flatness (small signal to saturation) (dB)	+/- 2 max			
Gain adjustment (dB)	20			
Harmonic distortion at -1 dB compression (dBc)	< -20 dBc			
Noise figure (dB)	12	12	15	15
Spurious (dBc)	< -60 dBc			
Typical phase linearity (°/100MHz)	+/- 4 °			
Input impedance (Ω)	50			
Output impedance (Ω)	50			
Mismatch VSWR tolerance	Infinite for any phase, with adjustable foldback protection			
Output RF sample ports (forward & reverse) (dB)	50	50	50	60

	SSP1-0.8G2.5-A	SSP2-0.8G2.5-A	SSP5-0.8G2.5-A	SSP10-0.8G2.5-A
Pulse Capability				
Pulse width (µs)	0.1 to 100			
Pulse Rate (KHz)	0 to 50			
Duty cycle (%)	1 max.			
RF rise and fall (ns)	30 ns max			
Pulse off isolation (dB)	80 minimum			
Pulse input	TTL			
Power				
Primary power voltage (Vac)	Single phase 100-264	Single phase 100-264	Single phase 100-264	three phases 100-264
Primary power frequency (Hz)	47 to 63			
Power consumption (W max.)	500	1 100	3 200	6 000
Environment				
Cooling	Air			
Working temperature (°C)	0 to 35			
Storage temperature (°C)	-10 to 50			
Connectors				
RF input connector (Front)	N fem			
RF output connector (Rear)	7/16 fem			
RF output sample ports (Rear)	N fem			
Pulse input connector (Rear)	N fem			
Interface connectors (Rear)	IEEE488 & Ethernet			
Primary power connector (Rear)	CEI320	CEI320	CEI320	DS3
Number of unities (U)	4	6	15	35
Size (WxHxD) (cm)	50.3x18x58	50.3x27x58	50.3x75x720	50.3x170x90
Weight (Kg)	36	65	170	380