PULSE POWER AMPLIFIERS
2.2 GHz to 2.7 GHz

Up to 60 KW output power

USER BENEFITS

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

AREAS OF APPLICATION

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

MAIN CHARACTERISTICS

- ✓ SSPxG-2.2G2.7-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**
SSP1-2.2G2.7-A	2 kW	1-20 µs	1%
SSP3-2.2G2.7-A	3 kW	1-20 µs	1%
SSP7-2.2G2.7-A	7 kW	1-20 µs	1%
SSP10-2.2G2.7-A	10 kW	1-20 µs	1%
SSP20-2.2G2.7-A	20 kW	1-20 µs	1%
SSP60-2,2G2.7-A	60 kW	1-20 µs	1%

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

SPECIFICATIONS

	SSP1-2.2G2.7-A	SSP3-2.2G2.7-A	SSP7-2.2G2.7-A	SSP10-2.2G2.7-A	SSP20-2.2G2.7-A	SSP60-2.2G2.7-A
Pulsed saturated output power						
Minimum (Watts)	1 000	3 000	7 000	10 000	20 000	60000
Typical (Watts)	1 200	3 500	7 500	12 500	23 000	65000
Mini.@3dB compression (Watts)	930	2 600	6 430	9 400	18 000	55 000
Mini.@1dB compression (Watts)	700	2 000	5 000	7 000	14 000	42 000
Input for rated output (dBm)	0	0	0	10	10	10
Instantaneous frequency response (GHz)	2.2 – 2.7					
Gain (dB)	60 min.	65 min	68.5 min	60 min	63 min	68.2 min
Flatness (small signal to saturation) (dB)	+/-2 max.					
Gain adjustment (dB)	20					
Harmonic distortion at -1 dB compression (dBc)	22 max.	22 max	22 max	20 max	20 max	20 max
Noise figure (dB)	12	12	12	15	15	15
Spurious (dBc)	<-60					
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	70	70

	SSP1-2.2G2.7-A	SSP3-2.2G2.7-A	SSP7-2.2G2.7-A	SSP10-2.2G2.7-A	SSP20-2.2G2.7-A	SSP50-2.6G3.3-A
Pulse Capability						
Pulse width (µs)	1 to 20					
Pulse Rate (KHz)	0 to 50					
Duty cycle (%)	1 max.					
RF rise and fall (ns)	30 max					
Pulse off isolation (dB)	80 min					
Pulse input	TTL					
Primary power voltage (Vac)	Single phase 100-264	Single phase 100-264	Single phase 100-264	Single phase 100-264	Single phase 100-264	Three phase 100-264
Primary power frequency (Hz)	47 to 63					
Power consumption (W max.)	150	450	720	1300	2800	7200
Cooling	Air					
Working temperature (°C)	0 to 35					
Storage temperature (°C)	-10 to 50					
RF input connector (Front)	N fem					
RF output connector (Rear)	7/16 fem	7/16 fem	7/16 fem	7/16 fem	EIA flange	EIA flange
RF output sample ports (Rear)	N fem					
Pulse input connector (Rear)	N fem					
Interface connectors (Rear)	IEEE 488 & Ethernet					
Primary power connector (Rear)	CEI320	CEI320	CEI320	CEI320	CEI320	DS3
Number of unities (U)	3	6	10	16	26	2x43
Size (WxHxD) (cm)	50.3x13x58	50.3x26x58	50.3x45x72	50.3x71x72	50.3x115x90	100x190x90
Weight (Kg)	16	36	90	180	320	870