

Ku-Band SSPA

5940

SPECIFICATIONS

Frequency range	14.0 to 14.5 GHz	Control	Mute
Output power @ 1 dB GCP	+46.7 dBm (47 W) typical +46.0 dBm (40 W) minimum		Gain
Third order intermodulation products (2 equal carriers each @ 6 dB OPBO from 1 dB GCP)	-25 dBc maximum	Summary alarm	Low/high power thresholds
Gain			Over temperature
Gain @ rated output power	60 dB minimum (0 dB SSPA attenuator setting)	Alarm logic levels	FET failure
Gain variation		Serial interface	Low/high RF power
14.0 to 14.5 GHz	±1.0 dB maximum	Data rate	Dry relay contacts
Any 40 MHz band	±0.3 dB maximum	DC outputs	RS232/RS422/RS485
Gain stability	±1.5 dB maximum, -40°C to +55°C	Main output	300/1200/2400/9600 bit/s
Gain adjustment	0 dB to -20 dB in 0.2 dB steps	Auxiliary output	
Noise power (@ max gain)	-82 dBm/Hz maximum	Total capacity	75 W (1.5 A) maximum
AM/PM conversion (@ 1 dB OPBO from 1 dB GCP)	2°/dB maximum	Power supply	
Spurious output (@ rated output power, in band)	-65 dBc maximum	Voltage	104 to 274 V AC, 47 to 63 Hz
Harmonics (@ rated output power)	-50 dBc maximum	Consumption	450 VA typical
Group delay (over 40 MHz)		Connectors	
Linear	0.03 ns/MHz	RF input	N female, 50 Ω
Parabolic	0.003 ns/MHz ²	RF output	PBR120 flange (WR75) (4 holes, M4 x 8 mm deep)
Ripple	1 ns p-p	RF monitor	N female, 50 Ω
Return loss		Monitor and control	MS3114E14-19P
Input	1.3:1 maximum	AC input	Amphenol T3110 000
Output	1.25:1 maximum	-48 V DC outputs	MS3114E8-2S
Protection	Over temperature shutdown Output isolator	Operating environment	
Monitor and control		Operating temperature range	-40°C to +55°C
Monitor	RF power meter RF monitor @ -40 dBc nominal FET flange temperature Internal supply rail voltages Status and alarms	Relative humidity	100%
		Sealing	IP66
		Cooling	Forced air
		Mechanical	
		Size	280 mm W x 355 mm D x 495 mm H
		Weight	27 kg