

Chapter 5 Specifications

Multi-Carrier Power Amplifier Specifications

The performance and physical specifications for the G3L-1929-160-001 MCPA are listed in Table 5-1.

Table 5-1. MCPA Specifications

Electrical	Specifications/Features
Operating Frequency Band	1930-1995 MHz
Instantaneous Bandwidth	65 MHz
Air Interface	CDMA, CDMA-2000, 1X-EVDO
RF Output Power	160 W Max. Nominal 150 W Max. Over all conditions 180 W APC (Automatic Power Control)
Maximum Input (before shutdown)	-1 dBm
Duty Cycle	Continuous
BTUs	2771 at 36 Amps, 27 V and 160 W average RF power output
RF Gain	63 dB
Gain Flatness	±0.5 dB (Max.)
Gain Variation over Temperature	±0.5 dB (Max.)
Spurious Emissions (ACP)	-13 dBm (Max.) 1 MHz Bandwidth
Harmonics	-13 dBm (Max.) 1 MHz Bandwidth; -50 dBc (Max.)
Out of Band Spurious	-60 dBc (Max) ITU-R, SM329-9, Category B
Input Return Loss	16 dB (Min.)
Output Return Loss	16 dB (Min.)
Input Voltage Range	+26 VDC to 28 VDC nominal; Operational range of 21.0 VDC to 30 VDC. MCPA disables at less than 20.5 VDC or greater than +30.5 VDC.
DC Current: (Max @ APC) (Nominal)	36 Amps at 26 V and 160 W average RF power output. 34.8 Amps at 27 V and 160 W average RF power output.
Efficiency	>17%
Mechanical	Specifications/Features