

Appendix A. Specifications

Table A-1 G3L-1900-54/54-A Wideband Multicarrier Cellular Amplifier Functional Specifications

Frequency Range	1930 - 1990 MHz (60 MHz Bandwidth)
Instantaneous Bandwidth	20 MHz *
Total Typical / Maximum Input Power	-15.7 - +4.8 / +5.8 dBm
Total Output Power	54 W (47.3 dBm)
Adjacent Channel Leakage Power Ratio (ACLR) Spectrum Analyzer settings: 30 KHz RBW, 300 KHz VBW, True RMS detector	ACLR1 <-46dBc@f=fc ±5 MHz ACLR2 <-51dBc@f=fc ±10 MHz
RF Gain	40 dB ±0.5 dB
Gain Flatness	±0.5 dB
Output Protection	Mismatch Protected
Input Port Return Loss	18 dB min
Harmonics	Better than -50 dBc
Out of Band Spurious	Better than -60 dBc
Duty Cycle	Continuous
DC Input Power: G3L-1900-54	-48 Vdc nominal, 6.5 amps typical (15 amps max) Operational -57 Vdc to -60 Vdc (Po derated outside normal operating range)
AC Input Power: G3L-1900-54-A	230 Vac nominal, 50/60 Hz, 1.9 amps typical (3 amps max) Operational 264 Vac to 300 Vac (Po derated outside normal operating range)
Operating Temperature	-10 °C to +50 °C
Storage Temperature	-40 °C to +85 °C
Operating Humidity	0 % to 80 % Relative Humidity (noncondensing)
Storage Humidity	0 % to 100 % Relative Humidity (noncondensing)
AC, DC Input, Summary Alarm, Base Station Communication TLCI Bus	Elcon Modular Flatpaq [™]
RF Input Connector	SMA Female
RF Output Connector	Type N-Female
Power Consumption	DC Version: 310 Watts @ P _o = 30 W average power AC Version: 325 Watts @ P _o = 30 W average power
Weight	28 lbs.
Dimensions	3.125" High, 16.75" Wide, 14.125" Deep, 15.75" Deep including connector guides

* The command received from the base station includes the operating band and based on that band, the pilot frequency sets to 10 MHz lower than the lowest carrier in the operating band.