Appendix E
Specifications (J1 Version Only)

E.1 Overview

The specifications listed in this appendix apply to obsolete model VZL-6943J1. A datasheet containing specifications for model VZL-6943J2 is provided in the "Drawings" chapter.

E.2 RF Specifications

Frequency:	1.0 - 2.5GHz
Output Power (TWT):	250W min. (Typical 300W)
Output Power (Flange):	225W min. (Typical 275W)
Instantaneous Bandwidth:	1.5GHz
Gain at Rated Power: (Note: -1dB with input isolator option and +29dB with optional SSIPA)	25.0dB min. (at band edges)
Small Signal Gain: (Note: -1dB with input isolator option and +29dB with optional SSIPA)	27.0dB min.
Attenuator Adjustment Range:	20.0dB min, 0.1dB resolution
RF Input Power: (Note: Input overdrive not to exceed 3dB.)	+28dBm nominal without SSIPA or 0dBm nominal with SSIPA
Gain Stability: (Note: Measured at constant RF input and temperature after 30 minute warm up.)	±0.25dB/24hrs. max. (after 30min. warm up)
Input VSWR:	2.5:1 max 1.5:1 max with optional input isolator.
Output VSWR:	2.5:1 typical
Full Specification Compliance Load VSWR:	1.5:1
Continuous Operation Load VSWR:	Any value. Output power will be automatically reduced to keep reflected RF lower than reflected RF trip point (nominally 25W). If unit can't maintain safe reflected RF output value, unit will shut down in Fault mode.

Residual AM (below 10kHz):	-50dBc
Residual AM (below 10kHz):	-20(1.3+logFkHz)dBc
Residual AM (above 500kHz):	-85
Noise Figure:	35dB max.

E.3 Electrical Specifications

Primary Power (Voltage):	Single phase, 220 - 240VAC ±10%
Primary Power (Frequency):	47 - 63Hz
Power Consumption:	2.6kVA (typical) 3.0kVA (max.)
Power Factor:	0.95 min., Meets requirements of total harmonic distortion standard IEC-555-2.
Filament Voltage:	Reduction of 10% in standby for extended TWT life.
Input Current:	200% max.

E.4 Environmental Specifications

Ambient Temperature (Operating):	-10 to +50ºC
Ambient Temperature (Non-operating):	-40 to +70ºC
Relative Humidity:	95% non-condensing
Altitude (Operating):	10,000ft. with standard adiabatic derating of 2ºC/1000ft.
Altitude (Non-operating):	40,000ft.
Shock and Vibration:	Designed for normal transportation environment per section 514.4 MIL-STD-810E. Designed to withstand 20G at 11ms (1/2 sine pulse) in non-operating configuration

E.5 Mechanical Specifications

Cooling:	Forced air w/integral blower. Rear air intake and exhaust. Maximum external pressure loss allowable: 0.5 inches water column.
RF Output Connection:	Type N female
RF Input Connection:	Type N female
Dimensions (WxHxD):	19.00 x 8.75 x 26.00in. (483 x 133 x 660mm)
Weight:	110lbs. Max

E.6 Heat and Acoustic

Heat Dissipation:	2,200 Watts max.
Acoustic Noise:	65dBA (as measured at 3 ft.)