

Technical Characteristics

	Transmit	Receive
Rated Output Power (see spectral regrowth)	25W (+44dBm)	N/A
Transmit RF Frequency	13.75-14.5 GHz	Low Band 10.7-11.7 GHz High Band 11.7-12.75 GHz
IF Frequency	950-1700 MHz	Low Band 950-1950 MHz High Band 1100-2150 MHz
IF VSWR	Input <1.5:1	Output <1.5:1
RF VSWR	Output <1.5:1	Input <1.5:1
Small Signal Gain	53 ±2dB	20 ±2 dB
Gain Variation (over frequency at fixed temperature)	±1.0 dB over any 36 MHz band	±0.5 dB (in any 36 MHz Band) ±1.2 dB (over operating frequency range)
Gain Variation (over temperature at fixed frequency)	±1.0 dB/°C	
Output P1dB	>+44 dBm	N/A
Spectral Regrowth (guaranteed over temperature and frequency at rated output power)	<-30 dBc (OQPSK at 2x symbol rate offset)	N/A
Phase Noise (with optional internal reference)	1 kHz <-69 dBc/Hz 10 kHz <-69 dBc/Hz 100 kHz <-81 dBc/Hz 1 MHz <-87 dBc/Hz 10 MHz <-122 dBc/Hz	10 kHz <-30 dBc/Hz 100 kHz <-50 dBc/Hz 1 kHz <-55 dBc/Hz 10 kHz <-70 dBc/Hz 100 kHz <-95 dBc/Hz 1 kHz <-120 dBc/Hz 10 MHz <-120 dBc/Hz
Noise Power Density – Transmit	<-110 dBm/Hz (14.47-14.5 GHz)	N/A
Output Spurious (unmodulated CW@ rated output power)	<-60 dBc (13.75-14.5 GHz)	N/A
3rd Order Intermodulation Products (OIP3)	N/A	>0 dBm
Image Rejection	N/A	40 dB (minimum)
Group Delay (linear)	N/A	±1.0 ns (over any 36 MHz band)
IF Leakage (Input Terminated)	N/A	<-88 dBm
In-Band Spurious (@ -50 dBm input)	N/A	<-56 dBc

10 MHz Reference (Optional)	
Accuracy	0.03 ppm at 25°
Stability	0.03 ppm ppm first year, better than 0.16 ppm over 20 years
Output Level	+7.5 ±1.5 dBm
Power	
AC Power (typical)	115 VAC, 360-800 Hz
AC Power Draw (typical at rated output power)	<345W
Physical	
Size	17.5" L x 13.6" W x 2.5" H
Weight	21 lbs Max
Operating Temperature (ambient air)	-15°C to +55°C
Relative Humidity	DO-160G 6.3.1A Compliant

Interfaces	
Input Power	3-pin Circular (38999 Compliant)
Ethernet	4-pin Circular (38999 Compliant)
ACU Discrete	6-pin Circular (38999 Compliant)
TX IF	TNC
RX IF	TNC
Reference	TNC
RF Output	Type N
RX Input	Type N
Maintenance	RJ-45 Circular (38999 Compliant)
Debug	9-Pin D-Sub