

Table 1-1. WJ-8618B(S1) VHF/UHF Receiver, Specifications

Frequency Range	
WJ-8618B(S1)	20-500 MHz
WJ-8618B(S1) (with FE option) ...	20-1100 MHz
Detection Modes	AM, FM, CW and Pulse standard; Variable BFO and SSB optional (other modes are available on special order)
Tuning Scheme	Frequency synthesized local oscillators locked to internal reference
Reference Accuracy	1 part in 10^{-7} or external 1 MHz reference input
Tuning Resolution	100 Hz
Synthesizer Tuning Speed	3 msec typical, 10 msec maximum
Input Impedance	50 Ω
Input VSWR	2.5:1 Typical 3.0:1 Maximum
Noise Figure	9.5 dB typical, 11 dB maximum
Third Order Intercept Point	+8 dBm typical +3 dBm minimum (20-500 MHz) 0 dBm typical, -5 dBm minimum (500-1100 MHz)
Second Order Intercept Point	+50 dBm, minimum
Ultimate FM S+N/N	40 dBm minimum in 50 kHz BW
Oscillator Phase Noise	-105 dBc typical (20 kHz from the carrier)
Preselection	Automatically switched, suboctave (1.66:1) band- pass filters
LO Radiation	-100 dBm typical
Image Rejection	90 dB minimum
IF Rejection	90 dB minimum
Internal Spurious	Equivalent to -115 dBm maximum at the RF input
Reciprocal Mixing	With an input signal at a rated sensitivity level; an out-of-band signal removed 350 kHz in the 20 Hz IF bandwidth at a level of 70 dB above rated sensitivity will not degrade the desired output signal ratio (S+N)/N by more than 3 dB
IF Bandwidths	5 IF Bandwidths (To be selected from Table 1) Note: 5th IF BW position must be 500 kHz or greater
IF Shape Factor	See Table 1
Final IF	21.4 MHz, -30 dBm Nominal Output Level
AM Stability	6 dB maximum from AGC threshold to a level 100 dB above AGC threshold (maximum input -5 dBm)
Switched Video Output	1 volt peak-to-peak; nominal, into 91 ohm load for FM with peak frequency deviation at 30% of the IF Bandwidth and AM with 50% modulation. DC coupled for FM and AM
FM Monitor	DC coupled FM output, 1 volt peak-to-peak minimum, into 91 ohm load