

**Technical Specification for Low Noise Rubidium Frequency Standards Oscillator
5MHz to 100MHz SMA Female Connectors**

S.No	Specification	Parameters	Complied/Not Complied	Ref.Page No
1	Output	10MHz		
2	Level	+8dBm (± 2 dBm) into 50 Ohms, 0.5Vrms (Specify for 75 Ω load)		
3	Connector	SMA (J1), DB-9 (J2)		
		Option A		
4	Frequency Stability Allan Deviation	Frequency	10MHz	
		T=1s	$\leq 2 \times 10^{-12}$	
		T=10s	$\leq 5 \times 10^{-12}$	
		T=100s	$\leq 6 \times 10^{-12}$	
		T=1000s	$\leq 4 \times 10^{-12}$	
		Option 1		
5	Phase Noise(SSB)	Frequency	10MHz	
		1 Hz	-110dBc/Hz	
		10Hz	-135dBc/Hz	
		100Hz	-145dBc/Hz	
		1kHz	-155dBc/Hz	
		10kHz	-158dBc/Hz	
6	Harmonics	<-30dBc		
7	Spurious	100 KHz BW	<-100dBc	
8	Aging(After 30 days)			
9	Frequency 10MHz	$\leq 5 \times 10^{-12}$ /day $\leq 5 \times 10^{-11}$ /month $\leq 5 \times 10^{-10}$ /Year		
10	Accuracy at shipping @ 25°C		5×10^{-11}	
11	Frequency Retrace		After 1 hours of continues operation 3×10^{-11}	
12	Start Up (Warm) Time		<8 minutes, time to lock <7 minutes to $\pm 5 \times 10^{-9}$ at room temperature 25°C	
13	Frequency Adjustment	Mechanical	$\pm 2 \times 10^{-9}$	
		Electrical	$\pm 5 \times 10^{-9}$	
		(Optional H)	Control Voltage 0 ~ 5Vdc	
14	Power Supply		+12VDC to +15 VDC	
15	Power Consumption @ 25°C		22W Max at start (25°C) 6W at steady state	
16	Temperature	Operating	-40 to +70°C	
		Storage	-40 to +90°C	