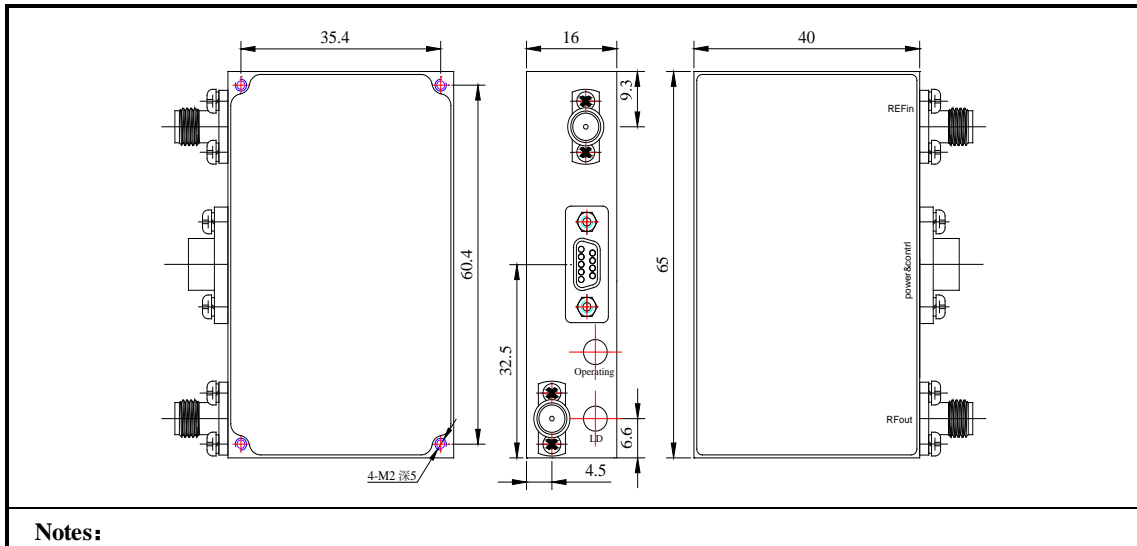


**General
Broadband
Frequency Synthesizer**



Description:					
1. Internal 100MHz TCXO;					
2. Detection options: internal and external reference for adaptive switching;					
3. Choose a different VCO to handle different frequency and bandwidth outputs.					
Frequency range (GHz)		1~20 (1~2/2~4/4~8/5~10/6~12/10~20)			
Step (MHz)		5			
Frequency switching (uS)		≤350 (Option: 20uS)			
Output Level (dBm)		≥+13			
Output Level flatness (dB)		±2			
Reference Frequency (MHz)		100			
Reference Level (dBm)		0~10			
Steady Frequency temperature stability		±5×10 ⁻⁷ (Same as external reference)			
Frequency accuracy		±5×10 ⁻⁷ (Same as external reference)			
Spurious (dBc)		≤-70			
Harmonics (dBc)		≤-10(20% output bandwidth: ≤-30)			
Phase Noise (-150dBc/Hz@1kHz)	dBc/Hz@100Hz	@10GHz	≤-76	@20GHz	≤-70
	dBc/Hz@1kHz		≤-92		≤-86
	dBc/Hz@10kHz		≤-95		≤-90
	dBc/Hz@100kHz		≤-95		≤-90
	dBc/Hz@1MHz		≤-100		≤-94
Power supply (V/mA)		+12/500			
Connector		RF connector: SMA-KFD Control and power connector: J30J-9ZKP			
Dimensions		65×40×16mm			
Control		SPI/UART			
Operating temperature (°C)		-40~+70			
Storage temperature (°C)		-55~+85			



DB9/J30J-9 Common Interface Definition (SPI and serial control)

Pin number	Pin definition	Function	Pin number	Pin definition	Function
1	U/S	Communication mode selection	6	SCLK	SPI Clock
2	TXD	Serial transmission	7	MOSI	SPI DATA
3	RXD	Serial receive	8	GND	GND
4	NSS	SPI LE	9	+12V	Power
5	MISO	SPI DATA			

Notes: When the U / S is set to high, the system is serial communication, U / S is set to low, the system for the SPI communication; this pin is floating when the high.