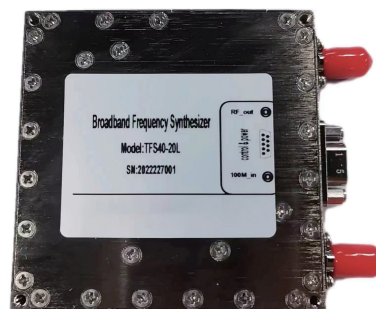


Agile Frequency Synthesizer

YX-TFS40

Features:

- ◆ Frequency Range: 1250MHz~10GHz / 2500MHz~20GHz
- ◆ Switching speed: 10us
- ◆ size: 65*65*13mm



Frequency Specifications

MODEL	TFS40-10	TFS40-20
RF Output Range (MHz)	1250~10000	2500~20000
Resolution (Hz)	0.1	
Switching speed (uS)	≤10	
Output power (dBm)	≥5	
Frequency stability	Same as reference	
Spur (dBc)	≤-65dBc(Typ) / -60(Max)	
Harmonics (dBc)	≤-5	
Ref input frequency (MHz)	100	
Phase Noise (100MHz)	≤-125 dBc/Hz@100Hz	
Phase Noise (100MHz)	≤-153 dBc/Hz@1kHz	
Phase Noise (100MHz)	≤-160 dBc/Hz@10kHz	
Phase Noise (100MHz)	≤-160 dBc/Hz@100kHz	
Phase Noise (100MHz)	≤-165 dBc/Hz@1MHz	
Ref input power (dBm)	7±3	

Phase Noise

TFS40-20		Output Frequency						
Phase Noise	1GHz		5GHz		10GHz		20GHz	
	standard	Option L	standard	Option L	standard	Option L	standard	Option L
dBc/Hz@100Hz	≤-95	≤-105	≤-81	≤-91	≤-75	≤-85	≤-69	≤-79
dBc/Hz@1kHz	≤-105	≤-120	≤-91	≤-106	≤-85	≤-100	≤-79	≤-94
dBc/Hz@10kHz	≤-115	≤-125	≤-101	≤-111	≤-95	≤-105	≤-89	≤-99
dBc/Hz@100kHz	≤-115	≤-125	≤-101	≤-111	≤-95	≤-105	≤-89	≤-99
dBc/Hz@1MHz	≤-115	≤-125	≤-101	≤-111	≤-95	≤-105	≤-89	≤-99

Electrical

Input Voltage (V/A)	+12V ± 0.5
Max Voltage	+15V
Current	≤ 1.5A (Warm-up)) / ≤ 0.8A
Communication Interface	SPI

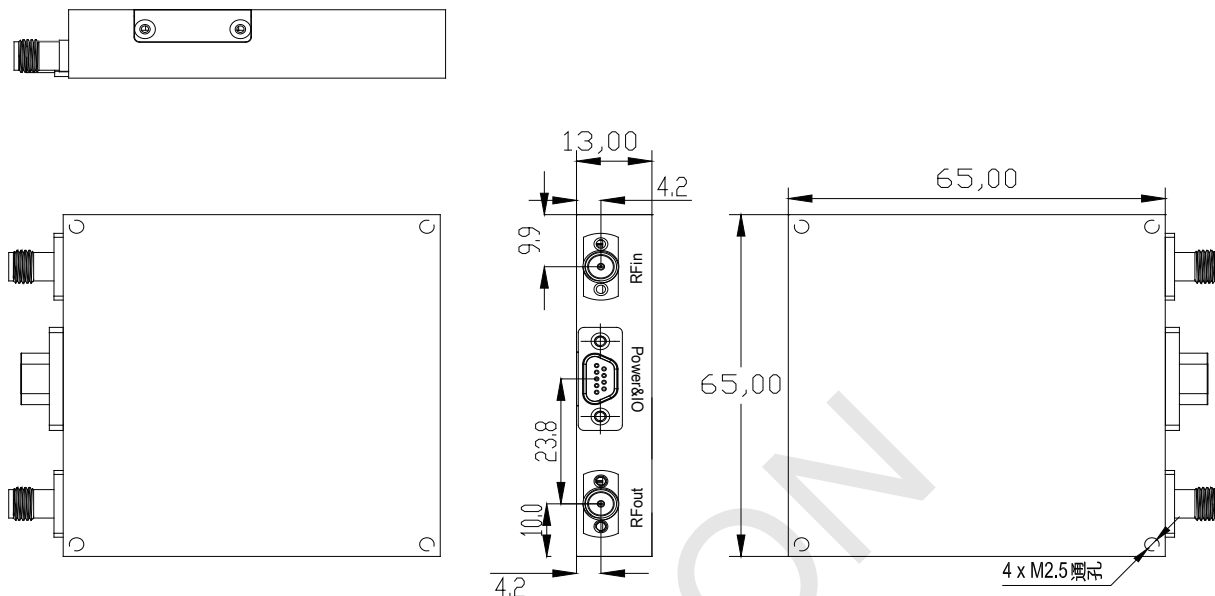
Environmental

Operating Temperature (℃)	-40~+70
Storage Temperature (℃)	-55~+85
Weight	≤ 150g
Dimensions	65*65*13mm

Agile Frequency Synthesizer

YX-TFS40

Dimensions(Unit:mm)



Interface Connector

RF in		SMA-K (Φ0.38)			
RF out		SMA-K (Φ0.38)			
Power and digital		J30J-9-ZKP			
J30J discipline definition					
1	+12V	4	GND	7	MISO (SPI)
2	+12V	5	LD (Lock detect: TTL high when locked)	8	SCK (SPI)
3	GND	6	MOSI (SPI)	9	LE (SPI)

Ordering Information

TFS40-10	Frequency Range: 1250~10000MHz
TFS40-20	Frequency Range: 2500~20000MHz
TFS40-10L	Frequency Range: 1250~10000MHz, option L
TFS40-20L	Frequency Range: 2500~20000MHz, option L