

**Model: : TLVE-75110-10**

**W-band VNA Frequency Extender  
75-110 GHz,WR-10**

**Feature:**

- Ultra Wide Band: 75-110 GHz
- Port Output Power (No Attenuation): 10dB Typ
- Dynamic Range @ 10 Hz BW: 120dB Typ
- Unconditional stability



**电气特性 Electrical Specifications :**

| 参数Parameter  | Min.  | Typ.  | Max.  | 单位Units |
|--|-------|-------|-------|---------|
| 频率范围 Frequency range   | 75    |       | 110   | GHz     |
| 输出功率 Port Output Power   |       | 10    |       | dBm     |
| 输入功率 Input Power (Damage)  |       |       | 20    | dBm     |
| 输出功率衰减 Output Power Attenuation<br>(Option:Variable attenuators) | 0     |       | 30    | dB      |
| 动态范围 Dynamic Range @ 10 Hz BW                                    |       | 110   |       | dB      |
| 方向性 Directivity  |       | 30    |       | dB      |
| 射频输入频率 RF Input Frequency  | 12.50 |       | 18.33 | GHz     |
| 射频输入功率 RF Input Power  | 0     |       | 6     | dBm     |
| 本振输入频率 LO Input Frequency  | 12.50 |       | 18.33 | GHz     |
| 本振输入功率 LO Input Power  | 0     |       | 6     | dBm     |
| 中频频率范围 IF Frequency Range  | 10    |       | 1000  | MHz     |
| 倍频次数 Multiplication Factor                                       |       | 6     |       |         |
| 幅度稳定度 Stability @ 300 Hz BW                                      |       | ±0.1  |       | dB      |
| 相位稳定度 Phase Stability @ 300 Hz BW                                |       | ±2.5° |       | °       |

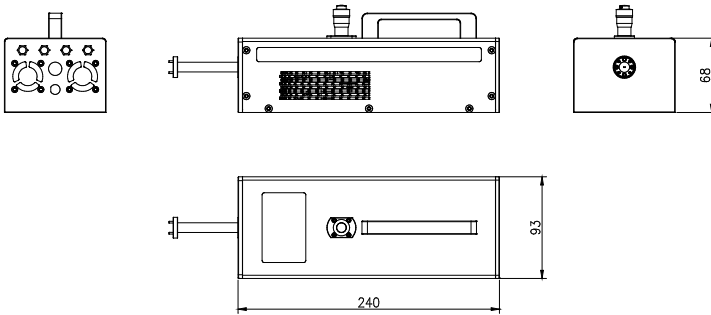
**机械特性 Mechanical Specifications :**

| 参数Parameter                | 指标 Value        |
|----------------------------|-----------------|
| 射频输入接口 RF Input Connector  | SMA Female      |
| 本振输入接口 LO Input Connector  | SMA Female      |
| 中频输出接口 IF Input Connector  | SMA Female      |
| 射频输出接口 RF Output Connector | WR-10/UG-387    |
| 供电引脚 Power Supply Pin      | FGG 0B 4 Core   |
| 尺寸 Size                    | 260*80.2* 120mm |

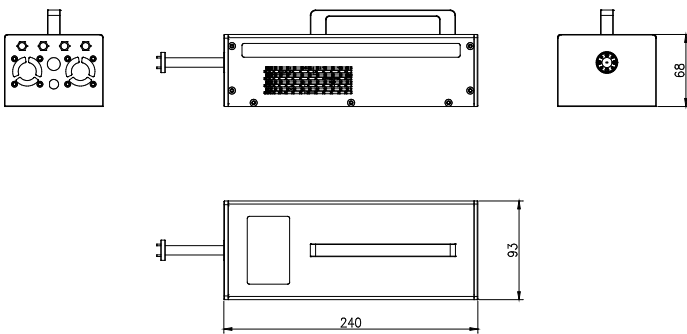
**绝对最大值 Absolute Maximum Ratings:**

| 参数Parameter               | 指标 Value |
|---------------------------|----------|
| 供电偏电压 Supply Bias Voltage | 240V     |
| 输入功率 Input Power          | 20dBm    |

**外形尺寸 Outline Drawing:**

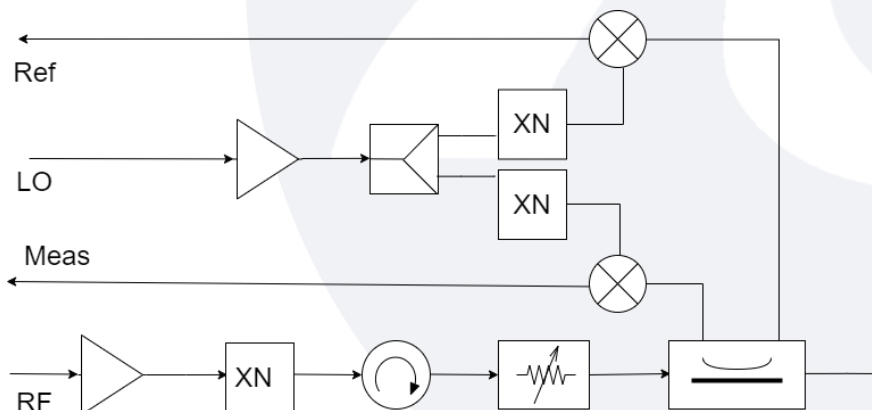


TLVE-75110-10-A



TLVE-75110-10

**原理框图 Block Diagrams:**



**温度环境 Environmental Conditions:**

| 参数Parameter                        | Min.  | Typ. | Max. | 单位<br>Units |
|------------------------------------|---|------|------|-------------|
| 操作温度 Operating Temperature         | 0   |      | +50  | °C          |
| 存储温度 Non-operating Temperature     | -45   |      | +125 | °C          |
| 相对湿度 Relative humidity             |   | 95   |      | %           |
| 海拔 Altitude                        | 50,000  |      |      | feet        |
| 震动 Shock / Vibration(MIL-STD-810F) | 25g rms (15 degree 2KHz) endurance, 1 hour per axis |      |      |             |
| 冲击 Shock(non operating)            | 20G for 11msc half sin wave,3 axis both directions  |      |      |             |

**订货信息 Ordering Information:**

| 标准型号 Part Number | 描述 Description  | 版本号Revision |
|------------------|---|-------------|
| TLVE-75110-10    | W-band VNA Frequency Extender, 75-110 GHz, Output Power:10 dB typ., Dynamic Range:120 dB typ., P1dB:15dBm,Magnitude Stability @ 300 Hz BW:±0.1dB,Phase Stability @ 300 Hz BW:2.5°   | Rev.1.1     |
| TLVE-75110-10-A  | W-band VNA Frequency Extender, 75-110 GHz, Output Power:10 dB typ., Dynamic Range:120 dB typ., P1dB:15dBm,Magnitude Stability @ 300 Hz BW:±0.1dB,Phase Stability @ 300 Hz BW:2.5°,with Micrometer driven variable attenuators | Rev.1.1     |

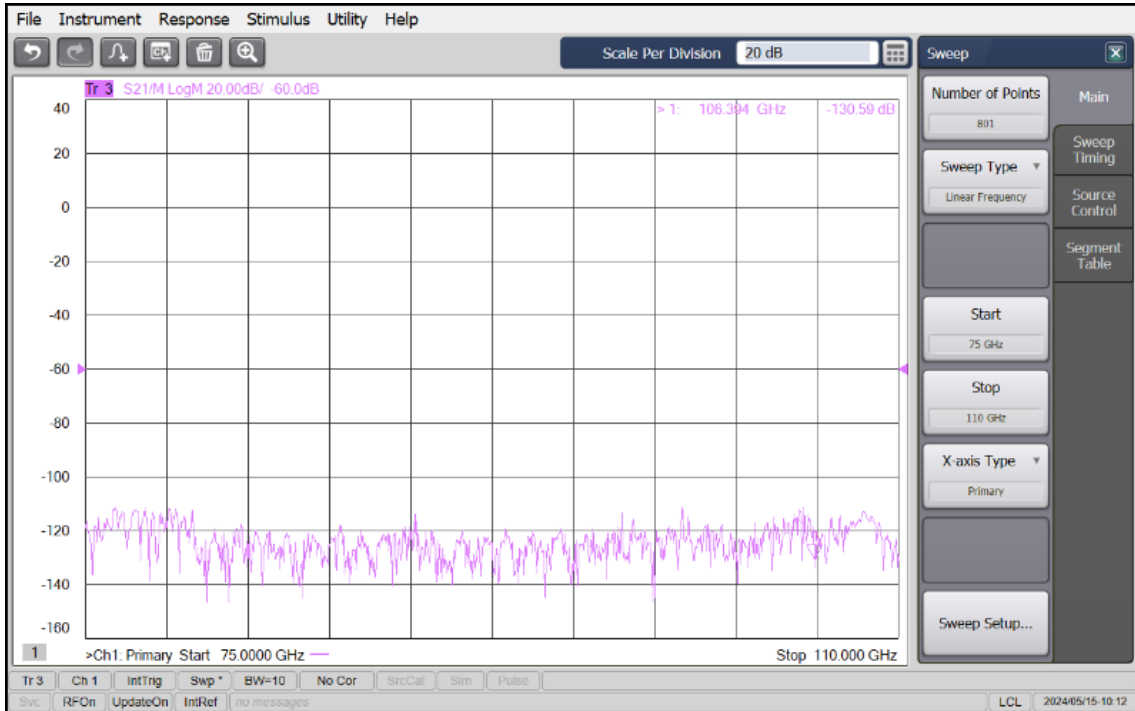
**随货配件 Components Included :**

| 标准型号 Part Number | 描述 Description         | 数量 Quantity |
|------------------|------------------------|-------------|
| S1-SMAMSMAM-1.2m | Coaxial Cable Assembly | 4 PCS       |
| TFACTDC-22012    | AC-to-DC Power Adapter | 1 PCS       |

**Notes:**

1. Dimensions and specifications may be changed without prior notice.
2. Standard Warranty:three years.

典型曲线 Typical Performance:



Dynamic range versus frequency of the TLVE-75110-10@BW 10Hz

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