

## U-Band VNA Frequency Receiver Extender 40-60GHz /WR-19/

**Model: TLRE-4060**

TLRE-4060 frequency extenders are a compact coaxial vector network analyzer (VNA) frequency extender receiver (RX) module that extends lower frequency VNA signals to 40 to 60 GHz.

### Features:

- Ultra Wide Band: 40-60 GHz
- Conversion loss: 10 dBm Typ
- Unconditional stability

### Applications:

- Transmit Extension
- Material characterisation

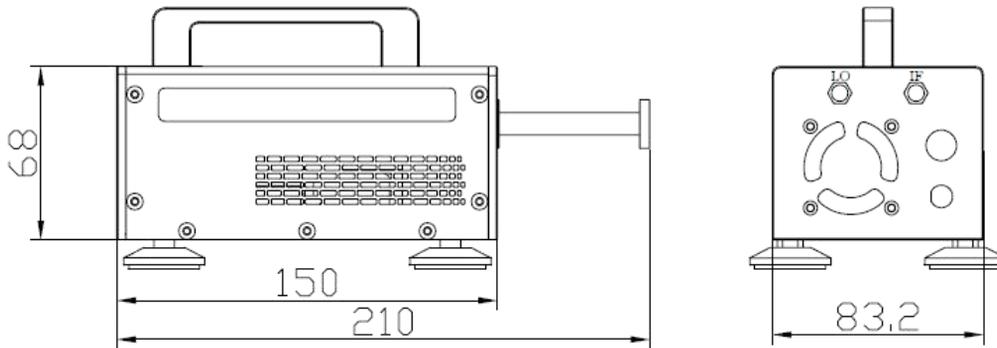
### Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	40		60	GHz
RF Input Power		-10	0	dBm
LO Input Frequency	10		15	GHz
LO Input Power	+3	+7	+10	dBm
IF Frequency Range	DC		20	GHz
Conversion Loss		10		dB
Multiplication Factor		4		

**Absolute Maximum Ratings :**

Description	Parameter	Units
RF Port Damage Level	0	dBm
LO Port Damage Level	+10	dBm
ESD sensitivity (HBm)	Class 0, passed 150V	
Supply Bias AC Voltage	240	V

**Outline Drawing: Unit:mm**



**Block Diagrams:**

Description	Parameter	Units
Operating Temperature	0 To +45	°C
Storage Temperature	-55 to +125	°C
Material	Al	
Finish	Gray spray paint	
Size	150*83.2*68	mm

### Connector Information:

Parameter	Value
RF Input Connector	WR-19/UG-383/U
LO Input Connector	SMA Female
IF Output Connector	SMA Female
Power Supply Pin	FGG 0B 4 Core

### Ordering Information:

Part Number	Description	Revision
TLRE-4060	Receiver Extender, 40-60 GHz, Conversion Loss:10dB typ.	Rev.1.1

### Components Included:

Part Number	Description	Quantity
TLACTDC-22012	AC-to-DC Power Adapter	1 PCS