

670 GHz Transmitter / Receiver Pair Fieldfox

General Features

- 650-675 GHz Transmitter / Receiver Converters for automotive FMCW radar
- Extend signal generators/spectrum analyzers or VNA's to mm-wave and THz
- Noise figure 14 dB typical, TX power -10 dBm dynamic range > 100 dB @ 10 Hz IF
- Extend any 20 GHz VNA without direct LO/IF access by linear converters
- Synchronous frequency and swept operation
- Single Sideband (SSB) versions eliminate image response
- Rugged screened enclosures machined from solid

Specifications

Model	THZBUC-1.5NB**	THZBDC-1.5NB**
Input/Output Frequency (GHz)	656-672	656-672
Input/Output RF Frequency (GHz)	4-20	4-20
Input LO Range (GHz)	Internal	Internal
Upconverter Power Output (dBm)	-10 typical	-
Upconverter Gain (dB)	> 10 dB typical	-
Downconverter SSB Noise Figure (dB)	-	< 15.0 typical
Downconverter Conversion Gain, dB	-	10.0 typical
LO /IF Connectors	SMA/K (F)	SMA/K (F)
RF Connector	WR1.5; UG387/U-M	WR1.5; UG387/U-M
Dimensions (mm)	145 x 230 x 60	100 x 200 x 60
DC Power (external PSU)	15V 2A	15V 1.5A

Notes

1. **Compatible with Signal Generators, Desktop & Portable VNAs up to 40 GHz
-developed for Keysight Fieldfox 20 GHz portable VNA Model N9918A, N9950A
2. Upconverter / Downconverter pair measures S21 (transmission) phase and amplitude
3. Reference oscillator input 10 MHz or 100 MHz for synchronization to external equipment
4. Other frequency ranges up to 1 THz on request
5. Shown with optional 670 GHz Potter type feedhorn
6. **How to make a request:** choose Model, or state frequency range, required interfaces, email to: sales@vivatechthz.com



Fig 1 670 GHz Upconverter / Downconverter Pair

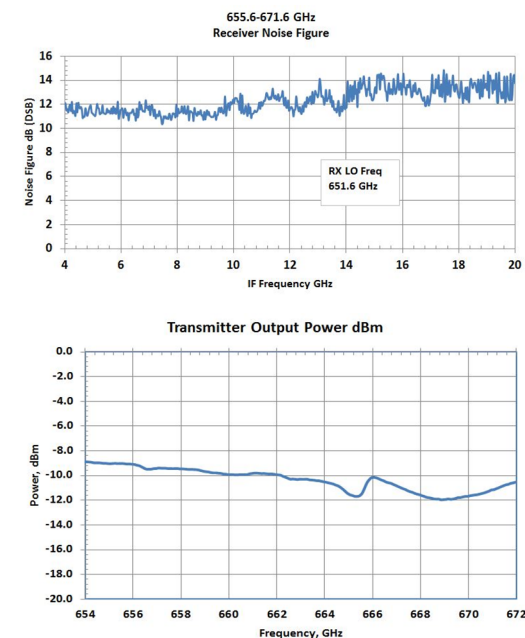


Fig 2 Noise Figure / Output Power