

3G Frequency Translator

TX501 RF Multi-band Translator

AEROFLEX
A passion for performance.



The Aeroflex RF Multi-band Translator provides a cost-effective and simple-to-use product to allow 3GPP Band 1 mobile devices to be used with network infrastructure operating in frequency bands 1 to 6

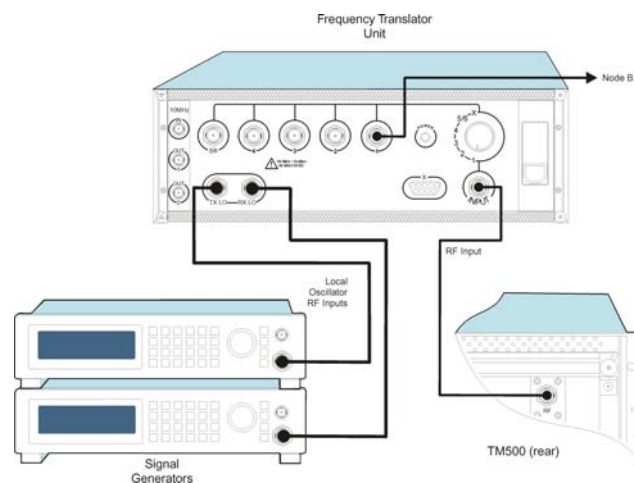
- Enables a 3GPP Band 1 device to operate in 3GPP Bands 1 to 6
- Performs RF translation between the Band 1 UE and Bands 1 to 6 Infrastructure
- Connects directly at RF
- Electrical control interface allows automated selection of frequency bands
- Simple configuration with no software required
- Permits a TM500 or TM100 to operate in any of 3GPP Rel. 6 frequency bands

RF Translator

The RF Multi-Band Translator is configured simply by connecting the RF INPUT port to the Test Mobile, and the appropriate RF BAND port to the Node B. The rotary switch is selected to the correct band.

The Uplink and Downlink local oscillator frequencies are specified on the external signal generators (available separately). The Node B, signal generators and Test Mobile may be locked to a common 10 MHz reference via the RF Translator.

For automated frequency band selection, an electrical interface is provided (not shown), allowing the required band to be selected via external control.



SPECIFICATION

SUPPORTED FREQUENCY BANDS

Band 1

Uplink: 1920-1980 MHz, Downlink: 2110-2170 MHz

Band 2

Uplink: 1850-1910 MHz, Downlink: 1930-1990 MHz

Band 3

Uplink: 1710-1785 MHz, Downlink: 1805-1880 MHz

Band 4

Uplink: 1710-1755 MHz, Downlink: 2110-2155 MHz

* Band 4 additional channels not supported

Band 5

Uplink: 824-849 MHz, Downlink: 869-894 MHz

Band 6

Uplink: 830-840 MHz, Downlink: 875-885 MHz

RF PERFORMANCE

UL/DL Frequency from/to UE

Uplink: 1920-1980 MHz, Downlink: 2110-2170 MHz

Duplex

Variable Duplex

Max input power

-25 dBm

UL/DL Gain

0 dB (nominal)

LO Frequency

Uplink: 70 MHz - 1096 MHz at +13 dBm

Downlink: 180 MHz - 1241 MHz at +13 dBm

SAFETY & EMC

CE

Conforms to appropriate CE legislation

TM500 DIMENSIONS

Height x width x depth

192 mm x 483 mm x 440 mm

ENVIRONMENTAL

Weight

7.3 kg

Operational temperature

0°C to +40°C

Storage temperature

-40°C to 70°C

Vibration, bump and shock

IEC 60068-2-6, IEC 60068-2-36 and IEC 600 68-2-27

Relative Humidity

10%-80% Non condensing

POWER SUPPLY

AC input voltage range

100 - 250 V

AC frequency range

50 - 60 Hz

Power consumption

250 VA max

EXTERNAL INTERFACES

RF to/from TM500

Female N type connectors

Multi-Band connections to/from Node B

Female N type connector

Uplink / Downlink LO inputs

Female N type connectors

10MHz input and outputs

BNC

Automated Control

Female 9-way D-type

Power in

IEC

ORDERING INFORMATION

When ordering please quote the full ordering number information.

RF Multi-Band Translator

TX501

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