



DS INSTRUMENTS

MX2500 – 2.5GHZ RF MIXER WITH LO

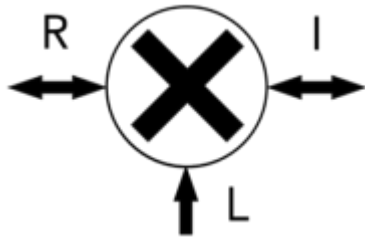


Description

The most compact and economical microwave integrated-mixer family on the planet.

New from DS Instruments, the **MX2500** is a wideband high-performance [mixer](#) with **integrated 50 – 2500MHz Local Oscillator**. LO frequency can be set with front controls, USB commands, or the provided windows PC application.

The MX2500 makes an extremely convenient **upconverter** or **downconverter** by eliminating the need for cabling and a separate signal source.



New product for 2019!

MX2500 Hybrid RF Mixer Features:

- USB powered from Laptop, battery-pack, Smartphone Charger, PC...
- Up-converting, down-converting, general purpose mixing supported
- Compact, rugged aluminum enclosure
- Bright and efficient OLED display
- Simple and effective control interface
- Active LO harmonic-filtering
- LO power level control
- Industry standard virtual COM port serial commands
- Premium gold 50-ohm microwave SMA ports (RF & IF)
- Internal precision 10MHz reference frequency source
- External reference frequency input port (MCX)
- High-power LO output port (MCX)

RF Hybrid Mixer Specs:

- Integrated **35 – 2500MHz** programmable local oscillator
- IF range: **1 – 1000MHz**
- RF range: **25-2500MHz**
- Typical LO to RF isolation: 35dB
- Typical LO to IF isolation: 25dB
- Maximum RF power input: +17dBm
- Phase noise at 4.4GHz: -82dBc (10KHz offset)
- Low conversion loss: < 8dB typical
- Return loss: >12 dB
- Typical IP3: 20dBm
- Input P1dB: +5dBm
- LO Harmonic level: -30dBc typical (50-2500MHz)
- Reference source: ±2.5PPM 10MHz TCXO

Typical Mixing Applications:

- General microwave lab applications
- Receiver development
- Communications applications
- Bluetooth development
- IOT testing
- Wifi testing
- Software defined radio applications
- Block converting
- Defense / electronic warfare

Performance and Mechanical:

