Product catalog

Up Converter Modules

Up converter modules translate lower-frequency, IF or baseband signals to RF or microwave output bands. They are used in transmit chains, radar exciters, satellite uplinks, frequency-agile test sources and communication equipment.



Products: 5

Revision: 6 · Revision date: 2026-11-28



LCMIXUD-380-18000-2G

0.38–18 GHz RF Up/Downconverter Module with Internal LO

Separate upconversion and downconversion paths cover 0.38–18 GHz RF and 3.6 ±1 GHz IF, with up to 2 GHz instantaneous bandwidth. Both paths support direct operation over 0.38–4.6 GHz; internal LO sources and SPI control are integrated.

RF input frequency: Specification: 0.38–18; Unit: GHz; Notes: Broadband RF input

Converted IF output band: Specification: 3.6 ±1; Unit: GHz; Notes: Nominal centre 3.6 GHz

Direct RF output band: Specification: 0.38–4.6; Unit: GHz; Notes: Separate output path without frequency conversion

Instantaneous bandwidth: Specification: Up to 2; Unit: GHz; Notes: Source description; converted IF operation

Product details Product datasheet



LCMIXUD-6000-8500

6–8.5 GHz Integrated RF Up/Downconverter Module

Integrated conversion between 6–8.5 GHz RF and 3–5.5 GHz IF. The downconversion path provides 25 dB typical gain and 2 dB maximum noise figure; TTL control selects the active conversion direction.

RF operating frequency: Specification: 6–8.5; Unit: GHz

IF operating frequency: Specification: 3–5.5; Unit: GHz

Downconversion gain: Specification: 25; Typical; Unit: dB

Downconversion noise figure: Specification: 2; Maximum; Unit: dB

Product details Product datasheet



LCMIXU-2000-18000

2–18 GHz Broadband Upconverter with SPI Filter Control

Upconverter with 1.8 GHz IF, external dual LO inputs, ≥15 dB small-signal gain, ≥5 dBm output P1dB and 0.5 dB calibration attenuation steps.

RF output frequency: Value: 2–18; Unit: GHz

IF input frequency: Value: 1.8; Unit: GHz

IF input passband: Value: 1.8±0.5; Unit: GHz

Small-signal gain: Value: ≥15; Unit: dB; Notes: Minimum: 15 dB.

Product details Product datasheet



LCMIXU-6000-8300

6–8.3 GHz Upconverter with 3.5–5.8 GHz IF

SMA upconverter with at least 30 dB gain, internal 11.8 GHz LO synthesis and 160 mA typical current from a +28 V supply.

RF output frequency: Value: 6–8.3; Unit: GHz

IF input frequency: Value: 3.5–5.8; Unit: GHz

Upconversion gain: Value: ≥30; Unit: dB; Notes: Minimum: 30 dB.

Saturated output power (Psat): Value: ≤5; Unit: dBm; Notes: Upper bound stated in the source; not minimum output capability. Maximum: 5 dBm.

Product details Product datasheet

LCBUC-13750-14500-400

400 W Ku-Band Block Upconverter

A GaN Ku-band block upconverter with 950–1700 MHz IF input and 13750–14500 MHz RF output for satellite ground station transmit chains.

RF output frequency: Value: 13750–14500; Unit: MHz

Saturated RF output power: Value: 400; Unit: W

IF input frequency: Value: 950–1700; Unit: MHz

Local oscillator frequency: Value: 12800; Unit: MHz

Product details Product datasheet

Document notice

Specifications are subject to revision. Before design release, confirm the current document revision and product-specific requirements with LCRF. The approved quotation and order documentation define the supplied configuration.