

## 3475-3600 MHz Integrated Transceiver



510004\_2

### Part number

**510004-2**

#### Downconverter specifications: (Rx)

RF Input Frequency	3575 - 3600 MHz
IF Output Frequency	551 - 576 MHz
Gain	25 ± 6 dB (-30°C to +60°C)
Gain Flatness	4.5 dB typ., 5.5 dB Max. (-30°C to +60°C)
Noise Figure	6 dB Typ. 7 dB Max.
Output 1 dB Compression Point	+10 dBm Min.
IMD	-50 dBc Max.
Image Rejection	55 dB Min.
In-Band Spurious	-78 dBm Max.
LO Frequency	3024 MHz ± 50 KHz (-30°C to +60°C)
Phase Noise	-65 dBc/Hz @ 100 Hz -85 dBc/Hz @ 1 KHz -88 dBc/Hz @ 10 KHz

#### Upconverter specifications: (Tx)

IF Input Frequency	35 - 60 MHz
RF Output Frequency	3475 - 3500 MHz
Gain	22 ± 5 dB (-30°C to +60°C)
Gain Flatness	4 dB Max. (-30°C to +60°C)
Maximum Input Power	0 dBm
Output 1-dB Compression Point	+25 dBm Min.
Output Transmit Noise	-105 dBm/Hz Max.
Output Spurious/Harmonics (+22 dBm Tx Out)	50 dBc (From 37-58 MHz input)
Output Power Blanking Threshold	-52 ± 5 dBm @ IF Input
L.O. Frequency	3208 MHz ± 10 KHz (-30°C to +60°C)
Phase Noise	-65 dBc/Hz @ 100 Hz -85 dBc/Hz @ 1 KHz -87 dBc/Hz @ 10 KHz

#### General specifications:

IF Connector (Rx out / Tx In)	F-Type, 75 Ohm
Tx/Rx IF Return Loss	Tx In: -10 dB; Rx Out: -6 dB Max.
DC Supply	18 to 24 Volts DC (1500 mA @ 22 VDC)
TxRx RF Return Loss	- 7 dB Max.
Physical Dimensions:	
Size	13.5 x 13.5 x 3.75 in.
Weight	8.84 lbs. (with mount)



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**Antenna specifications:**

Gain	18 dBi Typ.
3 dB Beamwidth	18.5° Typ.
1st Side Lobe (relative to main beam)	20 dB Typ.
Cross Polarization	-25 dB Max.

**Environmental Specifications:**

Moisture	Environmentally sealed
Operating Temperature	-30°C to + 60°C
Wind	Operational to 50 mph

*\*Two tone test @ -5 dBm each at the output, 6 MHz spacing*