



FEATURES

- Tuning range 0.5 to 18 GHz (26.5 GHz optional)
- 1GHz IF with 500 MHz BW and 160 MHz or 140 MHz IF with 80 MHz BW
- > 60dB Dynamic Range
- <30 Watts Total Power
- Tuning Speed: Contact for factory information

The iWR-6910 is a high reliability, high performance RF tuner with minimal power consumption. The low profile microwave tuner is built using iRF's RF SMART Deck (Scalable, Modular Architecture for Receive/Transmit applications). The iWR-6910 leverages advanced microelectronics technology to enable superior SWAP reduction while also providing excellent RF performance. Despite its small size and low power consumption, the iWR-6910 provides excellent phase noise performance and signal fidelity. As part of iRF's innovative SMART product line, the iWR-6910 is easy to reconfigure for platform migration including VME, VPX and CD-ROM.

iWR-6910 APPLICATIONS

- Signals Intelligence
- Direction Finding
- Electronic Warfare
- Cross Pole/n-Channel
- Cyber Defense

SPECIFICATIONS (AT 25° C)

Frequency Range: 0.5 to 18 GHz (26.5 GHz optional)

Max Signal Amplitude: +20 dBm without damage

Noise Figure: 15 dB max., 13 dB typ.
Above 18 GHz, 3 dB degradation

Input IP3: +5 dBm typ., +2 dBm min.

Second Order Input Intercept Point: $\geq +50$ dBm

IF Outputs: 160 MHz, 140 MHz (optional), 70 MHz (optional), 1 GHz standard

IF Bandwidths: 500 MHz min @ 1 GHz IF for tuned frequency above 1.25 GHz,
Bandwidth decreases to 100 MHz at 0.45 GHz tuned frequency,
Pre-selector bypass mode 90 MHz, nom., 80 MHz, min. for IF at 160 MHz or 140 MHz
50 MHz, nom., 45 MHz min for IF at 70 MHz

Image and IF Rejection: ≥ 70 dB

Frequency Stability: $\leq \pm 1$ ppm

Tuning Speed: Contact factory for more details

Tuning Resolution: 1 kHz

Integrated Phase Noise: $\leq 0.4^\circ$ rms
(100 Hz to 10 MHz) typ.

Single Tone Spurious Free Dynamic Range:
 ≥ 55 dB, 60 dB typ.

RF to IF Gain: +20 dB \pm 1dB

RF Attenuation: 0 to 20 dB, 10dB steps

IF Attenuation: 0 to 30 dB, 1dB steps
(independent control for each IF output)

LO Leakage: < -90 dBm

Internally Generated Spurious: < -90 dBm

Phase Coherent: Through use of daisy chained LOs

Linear Dynamic Range: > 90 dB in a 1 MHz BW

IF Passband Flatness: ± 1 dB over 100 MHz,
 ± 1.5 dB over 500 MHz BW

OPERATING INFORMATION

Operating Temperature Range: -10°C to +50°C

Control Interface: 10/100/1000 Ethernet RJ-45

Power Consumption: < 30 watts

Voltage: +12 VDC

Weight: < 3 lbs

Dimensions: 7.9" x 4.25" x 1.74" (excluding connectors)