Products and Solutions Available

Cellular / UMTS / 3G / PCS Base Station - Military – RFID – Broadband – Wi-Fi – WiMax – Wireless

Raditek provides solutions for the Wireless and Microwave Telecommunications Industry, started in 1993 and continues to expand and evolve its comprehensive product ranges. Targeting Highest Performance, at the lowest price possible. Shipping world wide, Fully ROHS Compliant

1. ISOLATORS AND CIRCULATORS: We offer the widest range and best performance Stripline, Microstrip, Coaxial and Waveguide isolators in the world, extremely aggressive pricing structure. Our ferrites are the best anywhere
- From mWatts to MWatts, standard and special custom models, even including cryogenic models.
- Still the best specifications and the lowest prices in the industry.
- **Microstrip Drop-in on carrier** (3-100 GHz) including the Fuji (FDK) compatible RDKF 3-30 GHz.
- **Microstrip Substrate-only** mounting directly to Chassis or circuit board (3-100 GHz)
  - various bands within 7-26GHz Microstrip now available in SMT.
- **Stripline drop ins** 30MHz to 4GHz, including the 800M to 3.6 GHz Cellular, DCS, PCS, UMTS, WI-MAX, RFID bands.
  - SS Series with improved (–H) IMD performance typically –65 to –70dBc.
  - TT series With Ultra low IMD of –82 dBC maximum and –92dBc typical.
  - FF and FH Series 400-600MHz Drop-In Isolators and Circulators including our popular 450-470MHz, 100W units with a similar model being used in the major New York Metro Communication system upgrade.
- **Stripline drop in FH3 40 -320MHz, or LEO Satellite bands**
- **Lumped Element**: The RLEI series, is a low cost surface mount 5 and 7mm lumped element isolator that covers specific frequency bands from 824 to 2500MHz. Designed for high volume pick and place tape and reel application. Reel sizes are (2000 / 2500)
- **Coaxial Isolators and Circulators** 30MHz to 50 GHz with SMA, N, K, 2.4 connectors. with 2-3GHz Bandwidth.
  - Wide Band: Octave, Octave+ and Peripheral mode Coax Isolators: inc special 3.35-12.8GHz and 2-18GHz Full band units
  - Standard and Ultra Low Temperature Cryogenic Circulators. We have added to our standard 4-77°C Cryogenic Isolators and Circulators with the ultra low 20m°Kelvin to 4°C series. Operating at -272.98oC, just 0.02 C above "Absolute Zero" these units are used in many Radio Telescopes Currently available: 1.35-1.75GHz, 4-8GHz. 8-12GHz
- **Waveguide Isolators and Circulators** 2 to 170 GHz in all major frequency bands

2. OSCILLATORS: A comprehensive range of specialized oscillator products
- **PLO** (Phase Lock Dielectric Resonant Oscillators) from 1GHz to 42GHz, External Ref, Internal ref 0.5ppm
- **DRO** (Dielectric Resonator Oscillators) Free Running and Electrically tuned from 3-42GHz
- **VCO** (Voltage controlled Oscillators) from 100M-3GHz (SMT) fully reflowable
- **CRYSTAL: XO, VCXO, TCXO, VCTCXO** Various Crystal Oscillators, Surface mount SMT
- **OCXO** (Hi Stability Ovenized Crystal Oscillator) Including Stratum 3 and 3E compliant
  - Ultra low phase noise Models -170dBc at 10KGHz offset
- **SYNTHESIZERS and Synthesized PLO** 150M-26GHz without the need for harmonically related reference
- **FREQUENCY STANDARDS** Rubidium based 10¹¹ per year stability // GPS based 10¹² per year stability
- **YIG TUNED OSCILLATOR** 0.5-50GHz multi Octave bands to 50 GHz, Analog and 12 bit digital drivers

3. SPLITTERS, HYBRIDS, AND COUPLERS: Coaxial, drop-in, wide band and narrow band
- **Connectorized Hybrids and Couplers**: 200MHz to 18GHz
- **Connectorized Splitters and Combiners**: 2 to 12 way 200MHz to 18GHz
4. TELECOM SYSTEMS GROUP  Focus on IP (Internet Protocol)

- **SATCOM / VSAT:** Offers very advanced IP based Star networks based on Satellite delivery. The lowest cost satellite communications method, and HDLC (High Data Line Control) very efficient Satellite utilization! for applications including: IPTV (networks to many 1000s), separate or combined (80Mbps downlink), to >6Mbps uplink. Lowest cost modem and Block Up Converter. Interactive IP Broadband for Consumer, SOHO and any application.

- **Satcom / VSAT, Ku, Ka Bands:** RURALSAT, IPSAT- DVB-RCS STAR, SCPC, DVB-S2, ACM, DAMA
- **Satcom Modems 10 MBPS:** SCPC ACM, DVB-S2. DVB-RCS Star to 100Mbs
- **Satcom BUCs/LNBs:** L band IF / C, X, Ku Bands From TWTA drivers to 50W Ka band
- **Point to Point / Terristial:** The excellent interface card options in our IDUs makes future expansion very easily achieved by swapping out cards in the IDU and not needing any major equipment change or additional equipment in most case 7-38GHz 8-32 PSK. QPSK, to 256QAM Carrier class, licensed bands

New Low Cost Rural link Standard licensed bands: 7, 8, 13, 15, 18, and 23 GHz frequencies. An ideal ODU for point to point, PDH digital microwave communication, SDH digital communication ODU for medium and small capacity.

- **Wi-Fi (812.11a & g)** Including WiFi mesh, extended coverage areas, low cost Pt to Pt radios
- **Wi-Max Point to Multipoint Systems (802.16 rev d)** Point to multipoint, Indoor and outdoor sub units etc. Compact, lowest cost, quick installation last mile and backhaul applications. Wi-Max 2.4, 3.8, 5.8GHz
- **Antennas**
- **Amplifiers:** GaN and LDMOS, Wide band, High Power to 6GHz
- **TWTA:** High power for Satellite Uplink ie >20KW CW C and X band

5. UNCOMPRESSED VIDEO /HDTV / HIGH SPEED DATA LINKS

- **HD wireless Camera link VRAX** Uncompressed HD video, up to 150M for studio camera, 1ms latency. Mounts on to back of camera, also can be used for HD video Pt to Pt.
- **mmWave System on a chip (SoC)** A 10x10mm BGA MMIC, incl.: antenna, synthesiser, to >3Gb/s, QPSK, uses include uncompressed HD Camera feed at 1.5Gb/s

6 FILTERS AND DIPLEXERS

- **Cavity:** Band Pass Filters and Diplexers, Custom Combline and High Power, Cellular Base station types
- **Ceramic:** LP, HP, BPF, Diplexer
- **SAW:** BPF, same high quality, same low cost!
- **Yig Tuned Filters 0.5-50GHz Mutli octave, wide band eg 200MHz Bandwidth at 2GHz, Analog and Digital drivers available

7 MISCELLANEOUS

- **LNA, AMPLIFIERS**
- **SWITCHES:** 10nS, GaAs MMIC, non-reflective, Waveguide switches, coaxial
- **LIMITER MODULES:** Customized for high volume applications 0.1-12GHz with powers up to 25W
- **LOW COST, QUALITY RF CONNECTORS, ADAPTERS AND CUSTOM CABLE ASSEMBLIES:**
- **A range of low cost RF connectors:** BNC, MCX, MMCX, N, SMA, SMB, SMC and TNC
- **Cable assemblies:** flexible, semi flexible, semi rigid, feeder and custom
- **Adapters, Terminations, Bias Tees and Lightning Protectors**

*We specialize in custom interfaces and multi-level components to help you and your team develop products that are technically superior and cost effective and have that competitive edge we all need.*

*We are proud of our reputation for putting the customer first in every area of our operations.*