



## FEATURES

- Bit Error Rate Tester operates stand alone up to 40 Mbps
- Modulator: ARTM Tier 0 (PCM/FM) legacy waveform as well as the more spectrally-efficient Tier I (SOQPSK-TG) and Tier II (ARTM CPM) waveforms
- Single or Multi Band Transmitter (L, S, C)
- 10mW output (higher power levels available)
- Modular, Scalable architecture
- Rugged, Compact unit

## OVERVIEW

The IOCRF Family of transmitters are designed for use in the Model AL6601 Test Platform. The microwave signal can be used to verify complete RF link operation by injecting a signal directly at the receive site's antenna or at the receiver input. Passing the signal thru a receiver, demodulator and bit sync, the recovered data and clock are fed back into the AL6601's receiver inputs for measurement.

The IOCRF is currently available in three (3) options: Tri-Band (L,S, lower C) (10mw), Tri-Band (1W), and Quad-Band (L,S, lower C, Mid-C) (10mw). Other options may be implemented (contact factory for more information). The IOCRF control module requires (1) slot in the AL6601 chassis and provides a TTL data and clock input for external data. The daisy chain bus of the AL6601 also allows for data to be transmitted via and external card such as an IOCBER7, IOCBER8 or IOCBER9 tester module.

Control and setup of the IOCRF modules is achieved via the AL6601 Front Panel or externally via RS-232 or Ethernet remote control.

## OVERVIEW

### ORDERING CODES

- IOCRF-1: Tri-Band, 10mw
- IOCRF-2: Tri-Band, 1W
- IOCRF-3: Quad-Band, 10mw
- Other: Contact factory

### INPUT

- TTL data/clock
- BNC connectors
- 50, 75, 10K ohm termination; jumper selectable
- Drives and receives the chassis daisy chain bus

### OUTPUT

- 10 mw / 1W power on SMA type connector
- Three band operation (tunable in 0.5 MHz steps):
  - 1435.5-1534.5 MHz (Lower-L band)
  - 1750.0-1855.0 MHz (Upper-L band)
  - 2200.5-2394.5 MHz (S band)
  - 4400.0-4950.0 MHz (Lower-C band)
  - 5091.0-5150.0 MHz (Mid-C band) **optional**
- Carrier frequency accuracy: +/- 2.5 ppm over temperature, +/- 7.5 ppm all causes (including aging) over 5 years
- Modulation: ARTM Tier 0 (PCM/FM) legacy waveform as well as the more spectrally efficient Tier I (SOQPSK-TG) and Tier II (ARTM CPM) waveforms
- Data rates: 1-20 Mbps (0.5-10 Mbps for PCM/FM) PCM/FM, SOQPSK-TG, ARTM, CPM, BPSK, QPSK