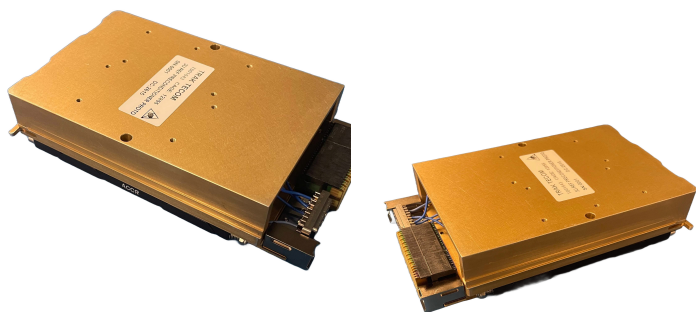


3U RF Preselector



TRAK TECOM's 3U RF Preselector is a new addition to its IMA capabilities. This product integrates two independent Miniature Multichannel EW Preselector (MMEP) modules within a 3U Open VPX form factor. Each MMEP provides signal conditioning across more than four octaves of bandwidth, covering frequencies from L- to Ku-band, and includes full bypass functionality along with nine selectable filter paths. This module is ideal for use in RF digitizer-based transceiver platforms. A PCIe interface provides control and status monitoring of the module.

Applications

- Broadband Radar
- EW Systems
- Communications Systems

Technical Characteristics

MMEP

- Frequency Range: 1.2-18GHz (9 overlapping bands)
- Gain: 17-23 dB
- Gain Flatness: +/- 1.5 dB
- Gain Control: >40dB [1 dB resolution]
- Out of Band Filter Rejection: >55dBc
- NF: <13.5dB [0dB attenuation]
- OP1dB: +8dBm [typical]
- Maximum No Damage Input Level: +21dBm
- VSWR: <2:1
- Filter Path to Path Isolation: >55dB
- Digital control response time: <500ns

Module

- Power: +12VDC (20 Watts typical)
- Control and Status Interface: PCIe Gen 3
- Form Factor: 3U Open VPX
- Operating Temperature Range: -40°C to +85°C

Features & Benefits

- Two independent channels of pre-selection and signal conditioning
- Broad Bandwidth: L band to Ku band via bypass or filter selection
- Excellent Filtering: 9 selectable filter paths covering greater than 4 octaves of bandwidth with >55dB of isolation between filter paths
- Fast Response Time: <500ns settling time for switching filter paths and adjusting gain via digital interface control
- High Resolution Gain Control: >40dB of gain adjustment in 0.5dB steps
- High No Damage RF Input: can withstand input drive levels up to +21dBm
- BIT detection: Integrated RF power detection
- Temperature Stability: Self-leveling gain control over
- PCIe Control and Status Interface
- Open VPX Form Factor



www.trak.com



Follow Us



solutions@trak.com