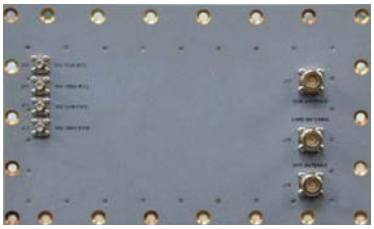
WV Communications

High Power, Rx/Tx Switch/Modulation Source Module

DESCRIPTION

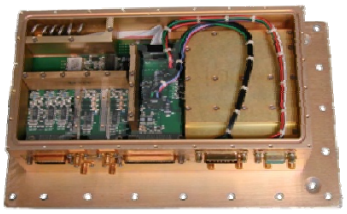
WV Communications has designed, developed and manufactures a Solid State, High Power Receive /Transmit Switch/Modulation Source Module, that provides Transmitter RF Carrier switching along with source Modulation. This Module can interface to a single or dual amplifier and can operate at maximum RF power levels up to 5,000 watts Peak Power, with ultra fast switching speeds. Module control is via remote operation and interfaces to a Waveform Generator which provides the complex I and Q signals to synthesize all pulse sequences needed. Along with the operations described, the module has a complete suite of Built In Test, (BIT) features. The units are tested and certified for military applications including full Environmental Stress Screening, (ESS) for the Military market, with commercial models available for less stringent environmental conditions. The Module described here, is for military applications and is used as part of a Interrogator System for Identification of Friend or Foe, (IFF). This model is used for both mobile ground systems, and airborne applications, performing 24/7 in some cases, and operational in some of the harshest environmental conditions found. Our High Power, Rx/Tx Switch/Modulation Source Module, incorporates the latest technology and engineering designs including: high power, fast switching times, low insertion loss, phase tracking of each channel, and ultra-low input and output VSWR's, while providing exceptional overall reliability and performance. The design heritage, and our years of experience, along with WV Communications commitment to quality and customer support, makes WV Communications the answer for all your High Power, Rx/Tx Switch/Modulation Source Modules.

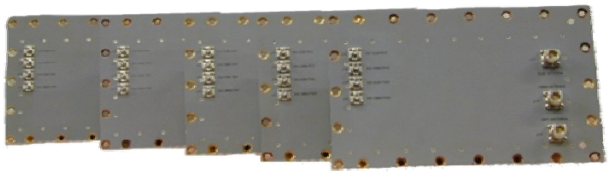
WV Communications has years of experience in engineering and manufacturing, and specializes in providing our customers with Integrated Sub-Assemblies usually encompassing a multiple number of our products into one turnkey integrated sub-assembly.



SPECIFICATIONS

Frequency Range:	1025 to 1035 MHz & 1085 to 1095 MHz
Maximum Peak Power:	5000 Watts / +67 dBm @ Low Band
Maximum Peak Power:	100 Milli-Watts / +20 dBm @ High Band
Dynamic Range:	+50 dBm to +67 dBm @ High Band
Insertion Loss:	0.5 dB Maximum
Switching Time:	100 ns Maximum
Duty Cycle:	2% Maximum @ Low Band
Duty Cycle:	100% Maximum @ High Band
RF Pulse Width:	32 us Maximum
Input & Output VSWR:	1.5:1 Maximum
Maximum Load VSWR:	Infinite @ any Phase Angle
Operational Temperature:	-25 to +70 Degrees Celsius
Vibration:	10g, 20 to 2000 Hz Random
Shock:	30g, Sinusoid Shock, 11 ms
Input Power:	DC Voltage





WV Communications can provide additional product solutions that will satisfy your unique, or custom system requirements, along with meeting or exceeding all of your technical specifications. Contact our engineering team for additional information for all your engineering and technical support requirements.

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