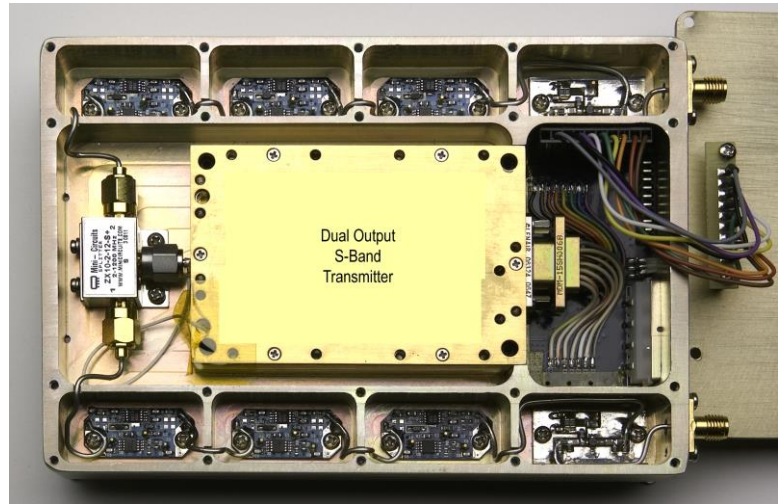


LUMISTAR

LS-14-M RF Transmitter for FM, SOQPSK, & CPM Modulator Data Sheet

Description:

The Lumistar LS-14-M RF Transmitter with FM, SOQPSK, & CPM Modulation allows for complex PCM data generated by the LS-70-S Dynamic Data Simulator to be output as an RF signal. The LS-14-M comes in a mechanical housing the size of a computer drive bay, requires power from a standard Molex connectors and has a serial connection to the LS-70 via a ribbon cable for the PCM data to be output along with control and status of the board. The RF signal from the transmitter feed a three stage GaAs FET attenuator for rapidly changing the RF signal strength and with minimal added noise or phase distortion. The LS-14-M can have either one or two outputs.



The LS-14-M output is measured and calibrated. The calibration information is stored in the memory of the LS-70-S. The two components working together form an excellent test device for TM equipment from the antenna through the receiver, bit synchronizer and frame sync to playback of archived data.

Key Features:

- ARTM Tier 0 (PCM/FM), ARTM Tier 1 (SOQPSK), or ARTM Tier II (Multi-h CPM) modulations
- Connectors to LS-70-S dynamic data simulator allowing complex PCM data stream generation and playback
- RF output can vary from -60 to +10 dBm
- Can have either one or two output RF Outputs
- Part Numbers: LS-14-MS S-Band 2200.5 – 2395.5 MHz; LS-14-ML Lower L Band 1435.5 – 1534.5 MHz; LS-14-MU Upper L Band 1750.5 – 1850.5 MHz

SPECIFICATIONS:

RF Modulator:

Modulation Types	ARTM Tier 0 (PCM/FM) ARTM Tier 1 (SOQPSK-TG) ARTM Tier 2 (Multi-h CPM)
Frequency Range	S-Band (2200-2395 MHz) L-Band (1435-1535 MHz) Upper L (1710-1850 MHz) Other bands – consult factory
Transmitter Deviation	Automatic
Pre-modulation Filter	Automatic
RF Output Level	-60 dB to +10 dB
Frequency Accuracy	± 0.03%

Environmental Characteristics:

Operating Temperature	0° to +50° C
Non-Operating Temp	-25° to +70° C
Operating Humidity	0 to 90% (Non-condensing)
Non-Operating Humidity	Protect from moisture and contamination

Physical:

Dimensions:	5.785" D x 4.0" W x 1.25" H (5.25" hard drive compatible)
Inputs/Outputs	RF on SMA Female; Molex 4 pin D for power Serial cable to LS-70

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Specifications are subject to change. Please verify the latest specifications at time of order.

5/6/2020