



# *SPLIT CARRIER MMDS TRANSMITTERS*

- BROADCAST QUALITY PERFORMANCE
- CLASS A LINEAR, TOTALLY SOLID STATE AMPLIFIERS  
F.C.C. TYPE ACCEPTED
- ADVANCED DIAGNOSTIC MONITORING
- FRONT PANEL RF TEST POINT
- STEREO AUDIO READY
- ACCEPTS I.F. OR BASEBAND SCRAMBLING

SYSTEMS WITH LITTLE OR NO MODIFICATIONS

- NTSC-PAL-SECAM COMPATIBLE
- UNEQUALED RELIABILITY (120,000 HOURS MTBF)
- TWO YEAR WARRANTY
- OTHER FREQUENCIES AND SERVICES INCLUDING  
ITFS AND OFS



LSI-100ST



LSI-25ST

**THE LSI-25ST, LSI-50ST AND LSI-100ST** *SPLIT CARRIER MMDS TRANSMITTERS UTILIZE THE VERY LATEST IN SOLID STATE AMPLIFIER DESIGN TECHNIQUES TO PRODUCE EXCEPTIONAL BROADCAST PERFORMANCE FOR YOUR SYSTEM.*

*LOMA'S UNIQUE INTELLIGENT FAULT DIAGNOSTIC AND METERING CIRCUITRY ENHANCES SYSTEM RELIABILITY AND MINIMIZES MAINTENANCE REQUIREMENTS BY IMMEDIATELY ALERTING THE OPERATOR TO ANY SYSTEM MALFUNCTION. FRONT PANEL INDICATORS PROVIDE A VISUAL DISPLAY OF MODULE STATUS. ALL AMPLIFIER MODULES COVER THE FULL MMDS BANDWIDTH ALLOWING SIMPLE FIELD REPLACEMENT WITHOUT RE-TUNING.*

*CONTACT YOUR LOMA SCIENTIFIC INTERNATIONAL SALES REPRESENTATIVE FOR MORE INFORMATION ON OUR COMPLETE LINE OF BROADCAST TRANSMITTERS, SYSTEM ACCESSORIES AND CUSTOM RF PRODUCTS.*

# Loma Scientific International

		LSI - 25ST	LSI - 50ST	LSI - 100ST
Output Power	Peak Visual	10-20 Watts <sup>†</sup>	25-50 Watts	50-100 Watts
	Average Aural	1-2 Watts	2-5 Watts	5-10 Watts
Emission	Visual	5M75C3F		
	Aural	250KF3E		
Color Transmission	NTSC (PAL and SECAM available)			
Operating Frequency	2500 - 2700 MHz (any 6, 7 or 8 MHz Channel)			
Frequency Stability	± 500 Hz Visual, ± 100 Hz Intercarrier (Higher Stability Optional)			
Output Power Variation	± 0.3 dB (7%); Manual Power Set			
	± 0.09 dB (2%); AGC			
Signal to Noise	> 60 dB			
Spurious Products	> 60 dBc			
Harmonic Suppression	> 65 dBc			
In Band Intermodulation ( IM3 )	> 70 dBc			
Out of Band Intermodulation	> 60 dBc			
RF Regulation	2% Maximum			
Output Impedance	50 ohm Type 'N' Jack			

## Visual Performance

Input Type	Composite Video
Input Level	1.0 V pk-pk for 87.5% Modulation, *Calibrated Detent; Front Panel Adjustment Range ± 6 dB
Input Impedance	75 ohm or High Impedance Loop-Through
Frequency Response	Per FCC § 21.908 [b]
Modulation Range	To 95% Modulation Depth
Differential Gain	2% Maximum
Differential Phase	0.5° Maximum
Low Frequency Linearity	5% Maximum
Envelope Delay	Per FCC § 73.687 [a] [3]
Frequency Response vs. Brightness	± 0.5 dB Maximum
K Factor ( 2T Pulse )	2% Maximum
ICPM	3° Maximum

## Aural Performance

Input Type	*Balanced, 600 ohm or High Impedance Bridge
Input Level	0 dBm ± 10 dB
Frequency Response	*Within ± 0.5 dB of 75 Microseconds Preemphasis , 30 Hz to 15 kHz
Harmonic Distortion	0.5% max at 25 kHz Deviation
FM Hum and Noise	60 dB min below 25 kHz Deviation

## General and Mechanical

Ambient Operating Temperature	-30° C to 55° C		
Relative Humidity	95% Maximum		
Power Requirements	115/220 VAC ± 15%, 50/60 Hz		
Mechanical Dimensions ( H x W x D )	8.75" x 19" x 22.5"	15.75" x 19" x 22.5"	22.75" x 19" x 22.5"
Weight	45 lbs.	80 lbs.	130 lbs.

## Features

Metering	Visual, Aural, and Reflected Power, RF Amplifier Supply Voltage
Self Test Diagnostics	Visual and Aural Amplifiers, PLO Phase Lock, VSWR Overload *Video Sense Feature
Test Point	-50 dB Output Sample - SMA Jack
Up-Converter	AGC Lock, Visual Drive Level and AGC Controls, Aural Drive Level LO and Oscillator Test Points (multiplier option only)

† 25 Watts with external diplexer option

\*Specifications with modulator model # TM2