



## Digital MMDS and BRS Series Transmitters LSI -50D and LSI -100D

The Loma Scientific International "D" Series transmitters enable wireless cable TV operators to broadcast DVB-C digital QAM channels over large geographical areas economically, by multiplexing various MPEG programs in a single RF licensed channel while maintaining digital video quality. For example, at 5:1 compression it is possible to deliver 155 digital programs in an MMDS market that



used to carry only 31 analog programs. The "D" series transmitters are perfect for single channel EBS/BRS FCC Part 27-M systems and can easily be adapted for multichannel systems with a single transmitter.

### Standard Features include:

- ❖ High reliability design with straightforward operation and easy setup
- ❖ Class A linear power amplification providing very low ACPR
- ❖ Modular components in a space saving compact chassis
- ❖ Wideband block upconversion simplifies channel selection
- ❖ Backward compatible with combined carrier analog modulators [1]
- ❖ Capable of multichannel operation at reduced power per channel [2]
- ❖ Front panel RF (SMA) test point and forward/reverse power meter

### Performance Specifications:

Output Power (average digital)		
LSI -50D		12.5 Watts (50 Watts, PEP)
LSI -100D		25 Watts (100 Watts, PEP)
Output Frequency		2.5~2.7 GHz
Output Impedance		50 Ohms
Phase Noise (at 10KHz offset)		-110 dBc/Hz
Signal to Noise		55 dB
Frequency Response		+/-0.25 dB
Group Delay		10 nSec
Spurious Products		<-60 dB
IF Input Level [2]		33~43 dBmV
IF Input Frequency (superband [3])		222~408 MHz
IF Input Impedance		75 Ohms
Temperature Range		0 to 40 degrees C
Power Requirements [4]		110/220 VAC
	<u>LSI -50D</u>	<u>LSI -100D</u>
AC Power Consumption	225 Watts	450 Watts
Size (D x W x H)	18.5"x19"x5.25"	25"x19"x7.00"
Weight	17 lbs.	31 lbs.

Consult LSI factory for the following options:

- [1] Analog local oscillator (cost savings) phase noise -90 dBc/Hz at 10 KHz offset
- [2] Multichannel model(s) and gain adjustment options, i.e. "broadband" multiple RF channels
- [3] Standard fixed IF = 41~47 MHz (US) 32.15~40.15 MHz (Europe)
- [4] Specify (country) at time of order. Universal AC option: 95~240 VAC, 50/60 Hz available

Specifications Subject to Change