



BEXT

LD STL Series 20 W

Frequency Agile,
Composite
940-960 MHz STL's

Available also for
220 - 440 MHz

- STL Transmitter now with 20 W power capability
- Completely Microprocessor supervised
- Frequency directly programmable from Front Panel via LCD Display menu
- Telemetry and remote controllable settings and functions
- State of the art audio quality
- High sensitivity & high selectivity receiver, designed to withstand the most hostile RF sites
- Excellent stereo separation
- Meets or exceeds all FCC and CCIR requirements

• Power Output:

LDT STL Transmitter:

Approximately 0.5 W to 20 W, adjustable

• LDT STL - TX Specifications

Frequency Range:

940 - 960 MHz directly digitally programmable in 10 kHz increments
(on request, any selected 15 MHz range between 220 MHz and 440 MHz)

Frequency of Operation:

Synthesized, microprocessor controlled

RF Output Connector / Impedance:

Type "N" female / 50 ohm

Frequency Stability:

Better than 1 ppm (± 1 kHz), -10° to 50° C (14° to 122° F)

Modulation Type:

Direct FM at carrier frequency

Asynchronous AM S/N ratio:

Better than -70 dB referred to 100% AM, no de-emphasis

Synchronous AM S/N Ratio:

Better than -50 dB referred to 100% AM (FM modulation ± 75 kHz at 400 Hz), no de-emphasis

Transient Intermodulation Distortion:

< 0.1% (typ. 0.05%) measured with a 3.18 kHz square wave & a 15 kHz sinewave, FM 75 kHz

Front panel displays:

Frequency, Modulation, Fwd Pwr, Ref Pwr, DC V, Current, Temperature, Alarms & Status indication for all functions

AC Power requirement:

Extended range 85 to 260 V, 50 or 60 Hz, single phase.

AC Power Consumption:

approx. 64 VA at full power

Ambient Temperature Range:

-10° to 50° C (14° to 122° F)

Spurious and Harmonic Emissions:

Meets or exceeds all FCC and CCIR requirements

Modulation Capability:

MPX / Composite program + RDS/RBDS + 2 SCA Subcarrier channels

Audio Inputs:

MPX / Composite: Unbalanced BNC and Balanced XLR (selectable)

Mono: Balanced XLR

SCA / RDS / RBDS: Unbalanced BNC (2)

All levels adjustable from -20 dBm to +13 dBm, typ. set for 3.5 Vp-p (1.237 Vrms / 4.1 dBm)

Pre-emphasis (75 μ sec for FCC, 50 μ sec for CCIR), defeatable for flat inputs

RF Monitor: BNC, approx. -30 dB

Interlock: BNC, mutes RF when grounded

Serial Interface: DB9 female RS 232

Telemetry & Remote Control: DB15 female

Composite FM S/N Ratio:

Better than 80 dB below 75 kHz deviation measured in a 40 Hz to 75 kHz bandwidth, de-emphasized, RMS detector

Composite Total Harmonic Distortion:

Better than 0.1%

Stereo Separation:

Greater than 65 dB

Composite Amplitude Response:

± 0.2 dB or less, 40 Hz - 53 kHz
 ± 0.3 dB or less, 53 kHz - 100 kHz

Front Panel Size:

483 mm (19") W x 88 mm (3½") H

(2 RU standard rack spaces high)

Overall Depth: 344 mm (13½")

Net Weight: 6 kg (13.2 Lbs)

• LDR STL - Receiver Specifications

RF Input Connector/Impedance:

Type "N" female, 50 ohm

Frequency Range:

940 - 960 MHz directly digitally programmable in 10 kHz increments

(on request, any selected 15 MHz range between 220 MHz and 440 MHz)

Sensitivity:

Monaural, -67 dBm for > 68 dB S/N RMS, de-emphasized, 75 kHz deviation

Composite, -47 dBm for > 68 dB S/N RMS, de-emphasized, 40 Hz to 15 kHz

Stereo (Left and Right Channel, decoded, de-emphasized), -47 dBm for > 62 dB S/N RMS

Composite Total Harmonic Distortion:

0.4% or less

Composite amplitude response:

± 0.2 dB or less, 40 Hz to 53 kHz

± 0.6 dB or less, 53 kHz to 100 kHz

Stereo Separation:

Greater than 50 dB @ 1 kHz

Greater than 40 dB, 50 Hz to 15 kHz

Crosstalk:

Main to Sub / Sub to Main, Greater than 45 dB

Selectivity (static):

-20 dB @ 200 KHz

-35 dB @ 300 KHz

-55 dB @ 400 KHz

LCD Displays:

Frequency, Modulation, RF Signal Level, Alarms & Status indication for all functions

Audio Outputs:

Mpx / Composite: Unbalanced BNC and

Balanced XLR (selectable)

Mono: Balanced XLR

SCA / RDS / RBDS: Unbalanced BNC

10.7 MHz IF Monitor:

BNC connector

RS232:

DB9

Telemetry & Remote Control:

DB25
Levels: All levels adjustable from -20 dBm to +13 dBm, typically set for 3.5 Vp-p (1.237 Vrms / 4.1 dBm)

Ambient Temperature Range: -10° to 50° C (14° to 122° F)

AC Power requirement:

Extended range 85 to 260 V, 50 or 60 Hz, single phase,

AC Power Consumption: approx. 18 VA

DC PWR Input:

24V DC, approx. 0.6 A

Front Panel Size:

483 mm (19") W x 88 mm (3½") H

(2 RU standard rack spaces high)

Overall Depth:

344 mm (13½")

Net Weight:

5.5 kg (12.1 Lbs)