LINKTECH STL SPECIFICATION:

Description

STL10 Studio to Transmitter Link / Inter-city Relay is a VHF / UHF FM communications system providing a high quality broadcast audio channel with variety optional bands.

These systems offer greater rejection of interference, superior noise performance, much lower channel cross-talk, and greater redundancy than currently available composite STL systems.



Low noise: the excellent signal to noise ratio either in mono or in λ stereo allows the use of this STL's in multi-hops networks without decreasing the audio quality. High allows antennas sensitivity: reduce STL's it to the investment.λ Great RF immunity: allows to operate in most hostile RF environments.λ High adjacent channel rejection: obtained thanks to the excellent mechanical shielding and the precision of RF filtering.λ High frequency stability with the internal temperature compensated crystal reference. λ

Integrated LCD Display: complete diagnostic and measurement front panel LCD displays. λ

Integrated information display and protection controls: for all transmit parameter and protection for malfunction. λ

Features

Synthesized from 220 to 260MHz, 300 to 320MHz, 320 to 340MHz,400 to 420MHz and 450 to 490MHz λ

The transmitted and received frequency can be easily set by digital front panel. Suitable for digital audio. The subsonic over modulation and the low λ frequency phase distortion are controlled by a feedback circuit in order to exalt the audio quality of the latest digital systems.

Low THD distortion: the THD value with stereo or mono demodulated and deemphasized signals is negligible. λ

Flat frequency response: due to the latest generation technology and λ the components precision the flatness of frequency response is absolute.

Specification

Frequency range: 220 to 239.99 MHz, 240 to 259.99 MHz, 300 to 319.99 MHz,

400 to 419.99 MHz, 450 to 469.99 MHz, 470 to 489.99 MHz.

-Modulation: FM, ±75 KHz peak deviation

-Frequency stability: <±100 Hz

-RF output power: 0 to 25 W \pm 0.5 dB

-Max reflected power: 5 W

-Harmonic suppression: <-65 dBC

-RF output impedance: 50 Ω

-RF output connector: N Type -female

-Audio/MPX input level: -10 to +13 dBm @±75 KHz deviation

-Audio/MPX input impedance: 10 K Ω / 600 Ω , Balanced / unbalanced

-Audio input connector: XLR-female

-AUX / MPX input level: -10 to +13 dBm @±75 KHz deviation

-AUX channel input impedance: 10 K Ω

-MPX and AUX input connector: BNC-female

-Pre-emphasis: 0 / 25/ 50 / 75 us

-S/N ratio Mono: >73 dB (20 to 20 KHz)

-S/N ratio Stereo: >68 dB (20 to 15 KHz)

-Distortion: <0.05% THD @± 75 KHz dev.

<0.2% THD @± 150 KHz dev. (limiter threshold > 150 KHz)

-Stereo crosstalk: >60 dB (100 to 5 KHz)

>50 dB (20 to 15 KHz) int. MPX encoder

>60 dB with ext. MPX encoder

-Audio channel frequency response: 20 to 15 KHz \pm 0.15 dB

-MPX input frequency response: 10 to 100 KHz \pm 0.15 dB

-AUX input frequency response: 10 to 100 KHz \pm 0.15 dB

-Mains power supply requirements: 90~264VAC; 127~370VDC, Full range universal input

-Operating temperature range: -10 to 45 $^{\circ}\mathrm{C}$

-Dimensions: 483 x 132.5 x 400 mm, rack std. 19" 2U

-Weight: 6.5 Kg

TECHNICAL CHARACTERISTICS of RECEIVER

- Frequency range: 220 to 239.99 MHz , 240 to 259.99 MHz , 300 to 319.99 MHz, 400 to 419.99 MHz , 450 to 469.99 MHz , 470 to 489.99 MHz.

-Sensitivity: -98 dBm at 16 dB SINDA

-Frequency response: 20 Hz to 53 KHz ±0.1 dB

-Stereo separation: 20 Hz to 15 KHz >58 dB

-S/N Ratio : >65 dB @-40 dBm , 75 KHz dev. and 1 KHz mod.

-THD: 20 Hz to 53 KHz < 0.3%

-Selectivity: ±160 KHz at -3 dB IF BW

 ± 500 KHz at -62 dB IF BW

-Image rejection: >65 dB

-Stereo audio output impedance: 600Ω balanced

-Stereo audio output connector: XLR-M

-MPX output impedance: $10K\Omega$

-MPX output connector: BNC-F

-Monitor output: >2x0.2 W stereo at 120Ω

-Monitor output connector: 6.3mm stereo phone jack

-RF input impedance: 50Ω

-RF input connector: N Type -female

-AC power: 85~264VAC; 120~370VDC, Full range universal input

-Power consumption: approx 25W from AC

-Operating temperature range: -10 to 45 $^{\circ}$ C

-Dimensions: 483 x 89 x 320 mm, rack std. 19" 2U

-Weight: 5 Kg

ANTENNA STL:

Type 7-Element Yagi

Narrative 7 element yagi, 9db directional gain. Black finish.

Includes mounting hardware.

Bandwidth @ Rated VSWR (MHz) 70

Gain (dBd) 9

General Frequency (MHz) 340-460

Downtilt (Deg.) None
Gain (dBi) 11.2

Connector Placement Center

Front to Back Ratio (dB) Not Specified

Horizontal Beamwidth (Deg) 45

Connector (direct) N Female

Polarization Vertical

Bending Moment @ RWV (ft-lb) Not Specified

Jumper Included None

Maximum Power Input (Watts) 300

Lightning Protection DC Ground

Incl. Hardware Fits up to 1.5" pipe

Specific Frequency (MHz) 340-460

Vertical Beamwidth (Deg) 45

Lateral Thrust @ RWV (Ib) Not Specified

Size (L x W x H) 34" x 10" x 4"

N/A

VSWR 2:1

Null Fill

Weight (lb) 1.25

Mount Hdw. Incl. U-bolts

Wind Load (sq-ft) Not Specified

Sidelobe Suppression (dB) N/A

Rated Wind Velocity (RWV, MPH) 100