



STL Radio Link Transmitters/Receivers

DTS/DRS Series



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- **Synthesized** from 48 to 1020 MHz (/1B, /FM, /3B, /4B, /5B, /GHz models) and from 1.2 to 2.7 GHz (/2G models). The transmitted and received frequencies can be easily set by the front panel display.
- **Excellent stereo separation.** A built-in group delay and amplitude precorrector guarantees a very low linear distortion and a great stereo separation in the whole 15kHz band.
- **Suitable for digital audio.** The subsonic overmodulation and the low frequency phase distortion are controlled by a feedback circuit in order to exalt the audio quality of the latest digital systems.
- **Low noise.** The excellent signal to noise ratio either in mono or in stereo assures the perfect use of this STL in multi-hops networks without decreasing the audio quality.
- **High sensitivity.** Using ultra low noise amplifiers, selective filters and with a powerful demodulation circuit the obtained receivers sensitivity is very high, so allowing longer link distances with reduced antenna investment.
- **Great RF immunity** allows to operate in most hostile RF environments.
- **High adjacent channel rejection**, obtained thanks to the excellent mechanical shielding and the precision of RF filtering.
- **High frequency stability** with the internal temperature compensated crystal reference.
- **Full metering:** complete diagnostic and measurement of all the main parameters is available using front panel LCD display. Full remote control is available as option.
- **Battery operations.** VDC power supply option is available for battery or solar panels operations.
- **Meets or exceeds** all FCC and CCIR requirements.



TECHNICAL CHARACTERISTICS

OVERALL CHARACTERISTICS

48-80 MHz	(DTS/1B, DRS/1B)
80-108 MHz	(DTS/30, DRS/FM)
160-300 MHz	(DTS/3B, DRS/3B)
300-512 MHz	(DTS/4B, DRS/4B)
512-830 MHz	(DTS/5B, DRS/5B)
830-1020 MHz	(DTS/G, DRS/G)
1.1-2.7 GHz	(DTS/2G, DRS/2G)
Frequency response	± 0.1 dB typ. from 16 Hz to 53 kHz, 0.5 dB to 100 kHz
Stereo separation	50 dB or better from 30 Hz to 15 kHz
Signal to Noise Ratio (mono)	> 70 dB with 75 kHz dev. and 400 Hz mod.
Signal to Noise Ratio (stereo)	> 66 dB with 75 kHz dev. de-emphasized
THD (mono)	< 0.1 %
THD (stereo)	< 0.2 %



TECHNICAL CHARACTERISTICS

TRANSMITTERS CHARACTERISTICS

Power outputs (continuously variable from 0 to nominal power):	
DTS/1B	15 W
DTS/30	30 W
DTS/3B	15 W
DTS/4B	15 W
DTS/5B	5 W
DTS/G	8 W
DTS/2G	5 W (25 W on request)
Output impedance	50 Ω
Output connector	N/female
Modulation	FM, 75 kHz peak deviation, 180k F3E mono, 256k F3E stereo
Audio/MPX Input level	-4 \div +13 dBm @ \pm 75kHz deviation
Audio Input connector	XLR female
Auxiliary Channel input level	-13 \div +4 dBm @ \pm 7.5 kHz dev.
MPX, Auxiliary and monitor connectors	BNC
MPX/mono Output level	-2 \div +12 dBm, 0.5 dB/step
Transmitter MPX monitor output level	0 \div +7dB, adjustable
Pre-emphasis	50 / 75 μ s
Spurious and harmonic emissions	below FCC and CCIR requirements
Synchronous AM S/N Ratio	<-60 dBc with Δ F \pm 75 kHz
Asynchronous AM S/N Ratio	<-70 dBc
Composite frequency response	\pm 0.15 dB from 15 Hz to 130 KHz
Stereo separation	> 55 dB or better from 30 Hz to 15 kHz
Capability	1 mono/stereo program, up to 3 SCA (optional)
Metering	output forward and reflected power, peak modulation, diagnostic functions
Operating temperature	-10°C to +45°C
AC input voltage	120 or 220/240 VAC, 50/60 Hz \pm 15%
Dimensions	depth 483 mm (19") x 2 U (standard rack unit)
Net weight	9.5 kg

RECEIVERS CHARACTERISTICS

Amplitude response	\pm 0.1 dB from 15 Hz to 53 kHz, \pm 0.5 dB from 53 kHz to 100 kHz
Monoaural Sensitivity	< - 90 dBm
Composite Sensitivity	< -68 dBm
Dynamic Selectivity	> +10 dB typ @ δ F=300kHz > +35 dB typ @ δ F=500kHz > +45 dB typ @ δ F=1.0 MHz
Metering	RF input level, peak modulation
RF input	N/female, 50 ohm
Image rejection	> 68 dB
Squelch threshold	adjustable from -100 dBm
Outputs	composite, monoaural, IF 10.7 MHz
Operating temperature	-10°C to +45°C
AC input voltage	single phase 110 or 220/240 VAC, 50/60 Hz \pm 15%
Dimensions:	depth 483 mm (19") x 2 U (standard rack unit)
Net weight	9 kg

OPTIONS ON REQUEST

\sqrt VDC	12 VDC or 24 VDC / Battery operation
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Features and specifications subject to change without notice.



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