The STL-20C is our latest composite STL transmitter. This transmitter replaces the STL-15C. There are a number of changes that were made to make this the price-value leader in composite STL products. The STL-20C is synthesized, frequency agile and utilizes a new RF amplifier as well as a cooling fan. More power, reliable, cooler, and easier to tune – that's the new STL-20C.

STL-20C

FREQUENCY AGILE COMPOSITE TRANSMITTER

STL-20C Specifications

Frequency Bands and Continuous Duty Maximum Power Output (±10%):

Model Number	Frequency Bands	Power
STL-20C-150	135-185 MHz	20 Watts @ 135-140 MHz 30 Watts @ 140-180 MHz 20 Watts @ 180-185 MHz
STL-20C-230	215-250 MHz	30 Watts @ 215-250 MHz
STL-20C-250	235-265 MHz	25 Watts @ 235-245 MHz 30 Watts @ 245-265 MHz
STL-20C -330	300-350 MHz	20 Watts @ 300-315 MHz 30 Watts @ 315-350 MHz
STL-20C-425	390-440 MHz	30 Watts @ 390-440 MHz
STL-20C-450	430-480 MHz	30 Watts @ 430-480 MHz
STL-20C-500	470-520 MHz	30 Watts @ 470-520 MHz
STL-20C-850	840-870 MHz	20 Watts @ 840-870 MHz
STL-20C-9255	900-935 MHz	20 Watts @ 900-935 MHz
STL-20C -950	935-965 MHz	20 Watts @ 935-960 MHz 18 Watts @ 960-965 MHz

Special Frequencies on request. Allow longer delivery time. Check with MARTI Sales for availability.

Frequency Selection: Frequency agile STL (internal rotary switches). Transmitter available in bands from 135 MHz to 965 MHz. See chart above for exact bands available.

Frequency Stability: -10° C to +45° C ±0.0001%.

Frequency Agility and Accuracy: An executed "dialed-in" frequency that operates within model frequency range will have an accuracy within:

STL-20C models 150 to 450:

± .00004% for frequencies divisible by 5 or 6.25 kHz,

± .00015% for MOST frequencies NOT divisible by 5 or 6.25 kHz*.

STL-20C model 950:

± .00004% for frequencies divisible by 10 or 12.5 kHz,

± .00015% for MOST frequencies NOT divisible by 10 or 12.5 kHz*.

* There are a few non-standard frequencies that will not automatically tune to within .00015% of requested frequency. For those frequencies, the operator must change to the nearest standard frequency and then manually tune the reference oscillator to the desired frequency. Contact the factory for more details or consult the operations manual.

Front Panel Controls: Meter control knob, power adjust pot, transmit/off switch

Metering: Illuminated meter indicates forward and reverse power, PA current, SUB level, and supply voltage. Peak-hold bar graph meter shows modulation. LEDs indicate transmit, AFC lock, high VSWR, and high temp.

Internal Operating Controls: 7 numeric rotary switches for frequency change, max power pot, modulation pot.

Audio Inputs: Mono: Balanced 600 ohms, +8dBm, 15 pin D connector or external terminal bus board. Composite: 3 Vpp for 100% modulation, 5K ohms, BNC Connector. Subcarriers: 3 Vpp for 10% injection, 5K ohms unbalanced, BNC Connectors.

Accessory Connector: 15 Pin D connector or external terminal bus board for external DC power, remote control, balanced mono line level input.

Audio Bandwidth: Mono: 15 kHz. Composite: 53 kHz.

Pre-Emphasis: 0, 25, 50, 75µsec. User selectable (mono mode only).

Deviation: Standard: ±50 kHz. Adjustable up to ±200 kHz max.

Signal-to-Noise: ≥74dB, 75µsec pre-emphasis, ±50 kHz deviation.

Frequency Response: Mono: ±.05dB, 50 Hz – 15 kHz. Composite: ±.05 dB, 50 Hz – 53 kHz. ±.1 dB, 53 Hz – 100 kHz. ±.2 dB, 100 Hz – 190 kHz.

Distortion: ≤0.2% from 50 Hz – 190 kHz.

Separation: 50dB min, 100 Hz – 1 kHz.

55dB min, 1 kHz – 15 kHz.

Spurious Emissions: More than 60dB from center frequency.

RF Connector: Type N female.

RF Output Impedance: 50 ohms.

Type of Technology to Produce Carrier: Phase-locked loop: synthesized.

Modulation: Direct FM (synthesized).

Operating Temp. Range: -20° C to +50° C ±0.0001%.

Automatic Changeover: Provision for automatic changeover by adding an ATS-20E and an additional transmitter.

Power Requirements: 110-120 VAC, 60 Hz or 220-240 VAC, 50/60 Hz input: (Manually switched internal linear supply). External DC operation on 12-15 or 15-30 Volts DC via D connector.

Fuse: 2.5 amp slo-blo for 115 VAC operation, 1.25 slo-blo for 230 VAC operations.

Approximate PA Current Rating: 6.5 to 8.5 amps at maximum power output. (Varies across frequency band and from model to model.)

Subcarrier Inputs: 2 BNC connectors, 5K ohm unbalanced, 3 Vpp for 10% injection.

Dimensions: 3.5" H x 19" W x 15.5" D. (8.89 cm H x 48.26 cm W x 39.37 cm D.)

Boxed Dimensions: 9" H x 22" W x 19" D. (55.88 cm H x 48.26 cm W x 22.86 cm D.)

Weight: Net 8.75 pounds. Domestic packed 17.25 pounds. (Net 3.97 kg. Export packed 7.82 kg.)

FCC ID: DDE-STL-20W-950S (FCC Part 74 Subpart E). 940-952 MHz. Emission Designators: 20K0F3E, 40K0F3E, 80K0F3E, 194KF8E, 280KF8E, 490KF8E.

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