

STL 20C - Specifications : Technical Specifications

AVAILABLE OPERATING FREQUENCIES

150 MHz Band:

Range from 135 to 185 MHz

230 MHz Band:

Range from 215 to 250 MHz

250 MHz Band:

Range from 235 to 265 MHz

330 MHz Band:

Range from 300 to 350 MHz

450 MHz Band:

Range from 430 to 480 MHz

950 MHz Band:

Range from 935 to 965 MHz

RF SPECIFICATIONS

Typical Max RF Output Power:

Power @ 135-140 MHz:

20 W

Power @ 140-180 MHz:

30 W

Power @ 180-185 MHz:

20 W

Power @ 215-250 MHz:

30 W

Power @ 235-245 MHz:

25 W

Power @ 245-265 MHz:

30 W

Power @ 300-315 MHz:

20 W

Power @ 315-350 MHz:

30 W

Power @ 430-480 MHz:

30 W

Power @ 480-520 MHz:

30 W

Power @ 840-870 MHz:

20 W

Power @ 900-935 MHz:

20 W

Power @ 935-960 MHz:

20 W

Power @ 960-965 MHz:

18 W

Selection:

Frequency agile STL (internal rotary switches)

Deviation:

± 50 kHz standard; adjustable up to ± 200 kHz max

Broadcast Electronics

Technical Specifications

Stability over Operating Temperature range:

$\pm 0.0001\%$

Agility and Accuracy (Models under 935 MHz):**For frequencies divisible by 5 or 6.25 kHz:**

$\pm 0.00004\%$

For MOST frequencies NOT divisible by 5 or 6.25 kHz:

$\pm 0.00015\%$

Agility and Accuracy (Models over 935 MHz):**For frequencies divisible by 10 or 12.5 kHz:**

$\pm 0.00004\%$

For MOST frequencies NOT divisible by 10 or 12.5 kHz:

$\pm 0.00015\%$

AUDIO SPECIFICATIONS

Modulation:

Direct FM (synthesized)

Type of technology to produce carrier:

Phase-locked loop (synthesized)

Spurious Emission:

More than 60 dB below carrier

RF Output Impedance:

50 Ohm

VSWR:

1.5:1 at all phase angles into 50 Ohm load

Mono Operation:**Connector Type:**

15-pin D connector or external terminal strip

Impedance:

Balanced 600 Ohms

Level:

+8 dBm

Audio Bandwidth:

50 Hz to 15 KHz

Pre-emphasis:

0, 25, 50, and 75 μ sec, user selectable

Signal To Noise:

≥ 74 dB, 75 μ sec pre-emphasis, ± 50 kHz deviation

Frequency Response (50 Hz to 15 kHz):

± 0.05 dB

Distortion:

$\leq 0.2\%$ from 50 Hz to 190 kHz

Subcarrier Inputs (Select up to two):

39 KHz, 67 KHz, 92 KHz, 110 KHz, 152 KHz, 185 KHz

Composite Operation:**Connector Type:**

BNC connector, unbalanced Female

Impedance:

75 Ohms

Level:

3 Vpp for 100% modulation

Audio Bandwidth:

53 KHz



Broadcast Electronics

Technical Specifications

Signal To Noise:

≥74 dB, 75 µsec pre-emphasis, ±50 kHz deviation

Frequency Response:**50 Hz to 53 kHz:**

±.05 dB

53 kHz to 100 kHz:

±.1 dB

100 kHz to 190 kHz:

±.2 dB

Separation:**100 Hz to 1 kHz:**

50 dB min

1 kHz to 15 kHz:

55 dB min

Distortion:

≤0.2% from 50 Hz to 190 kHz

Subcarrier Inputs (Select up to two):

92 KHz, 110 KHz, 152 KHz, 185 KHz

Subcarrier Operation:

3 Vpp for 10% injection, 5K Ohms unbalanced, BNC connectors

MECHANICAL/PHYSICAL

Accessory Connector:

15 pin D connector or external terminal bus board for external DC power, remote control, balanced mono line level input

RF Connector:

Type N female

Cooling Requirements:

Install in well ventilated rack

Airflow:

Internal flushing fan

Dimensions (Unpacked):

3.5"H x 19"W x 15.5"D (8.9cm H x 48.3cm W x 39.4cm D)

Weight (Unpacked):

9 lbs (4.1 kg)

ENVIRONMENTAL

Operating Temperature:

-20° C to +50° C

Altitude:

10,000 ft (3048m) max

Humidity:

95% maximum, non-condensing

ELECTRICAL

Voltage::

85-264 VAC; 47-63 Hz

AC Operation:

85-132 VAC or 176-264 VAC (manually switched internal linear supply), 50/60 Hz

DC Operation:

Broadcast Electronics

Technical Specifications

12-15 or 15-30 VDC via D connector

PA Current Draw:

6.5 to 8.5 amps at maximum power output

Power Consumption:

300 W Max (150 W typical)

Heat Dissipation:

300 W Max

Fuse:

2.5 amp slo-blo for 115 VAC operation, 1.25 slo-blo for 230 VAC operation

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

