

### STL 20M - Specifications : Technical Specifications

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#### AVAILABLE OPERATING FREQUENCIES

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**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

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**Frequency Band:**

135-965 MHz

**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 @ 470-520 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:**

Factory set single Frequency, fully synthesized

# Broadcast Electronics

## Technical Specifications

**Deviation:**

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

**Stability over Operating Temperature range:**

± 0.0001%

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

± 0.00004%

**For MOST frequencies NOT divisible by 5 or 6.25 kHz:**

± 0.00015%

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

± 0.00004%

**For MOST frequencies NOT divisible by 10 or 12.5 kHz:**

± 0.00015%

### AUDIO SPECIFICATIONS

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**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 µsec, user selectable

**Signal To Noise:**

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

**Frequency Response (50 Hz to 15 kHz):**

±.05 dB

**Distortion:**

≤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

**Subcarrier Operation:**

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

### MECHANICAL/PHYSICAL

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**Accessory Connector:**

# Broadcast Electronics

## Technical Specifications

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)

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### ENVIRONMENTAL

**Operating Temperature:**

-20° C to +50° C

**Altitude:**

10,000 ft (3048m) max

**Humidity:**

95% maximum, non-condensing

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### 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:**

12-15 or 15-30 VDC via D connector

**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

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### ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

