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

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
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

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):
±0.05 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

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)

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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