



## GENERAL

### Transmitter Type

FM Broadcast, 100% solid state

### Configuration

Two V1d FM Broadcast transmitters combined using one 3 kW combiner module.

### RF Output Power

HD Radio™ Digital mode:

260 W to 800 W into a 1.2 VSWR

260 W to 720 W into a 1.5 VSWR

HD Radio™ Hybrid mode:

130 W to 2000 W into a 1.2 VSWR

130 W to 1500 W into a 1.5 VSWR

Analog mode:

60 W to 2800 W into a 1.2 VSWR

30 W to 2500 W into a 1.5 VSWR

### RF Output Connection

7/8" EIA, female

(7/16" DIN available)

### RF Output Impedance

50 ohms unbalanced

### Efficiency

HD Radio™ Digital mode:

40% typical at 720 W

HD Radio™ Hybrid mode:

50% typical at 1800 W

Analog mode:

60% typical at 2500 W

### RF Load VSWR

1.5:1 - Automatic power reduction into higher VSWR

Protected from open and short circuits at all phase angles

### RF Frequency Range

87.5 MHz to 108 MHz

No tuning required

### Turn Around Loss

Better than TBD dB (Analog mode)

### Excitation

Nautel M50 Direct-to-Channel Digital FM Exciter

### Spurious and Harmonic

Meets or exceeds all FCC/IC requirements

## AC INPUT

### Voltage

180 V ac to 264 V ac, 1 phase, 50/60 Hz

### Power Consumption

HD Radio™ Digital mode:

1.8 kW at 720 W RF output (1.82 kVA)

HD Radio™ Hybrid mode:

3.6 kW at 1.8 kW RF output (3.6 kVA)

Analog mode:

4.16 kW at 2.5 kW RF output (4.2 kVA)

### Power Factor

Unity Power Factor Corrected (typically 0.99)

### Power Line Harmonics

IEEE 519-1992

## AUDIO PERFORMANCE

### Asynchronous AM S/N Ratio

Better than 60 dB below reference carrier with 100% amplitude modulation using 75  $\mu$ s de-emphasis (no FM modulation present)

### Synchronous AM S/N Ratio

Better than 50 dB below reference carrier with 100% amplitude modulation using 75  $\mu$ s de-emphasis

## ENVIRONMENTAL

### Temperature Range

0°C to +50°C

Derate 3°C per 500 m above sea level

(2°C per 1000 ft)

### Humidity Range

0% to 95% non-condensing

### Altitude

0 m to 3000 m (0 ft to 10,000 ft)

### Cooling Air Requirements

266m<sup>3</sup>/hr (156 cfm)

## PHYSICAL

### Dimensions

Open ventilation configuration

W = Standard 19" (48.3 cm) EIA rack

[minimum opening of 17.5" (44.5 cm)]

H = 8 RU = 14" (35.6 cm)

D = Dependent upon connector type (not including handles)

Type 'N' = 21.5" (54.6 cm)

7/16 DIN = 21.5" (54.6 cm)

7/8 EIA = 22.4" (56.9 cm)

### Weight

33.6 kg (74 lbs)

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.