

## GENERAL

### Transmitter Type

FM Broadcast, 100% solid state

### Configuration

2 RF power modules with integrated IPA PA's  
4 switching power supplies (2 per RF power module)

1 IPA power supply

Integrated exciter

### Standard Features

- Redundant IPA power supply
- Redundant low voltage power supplies
- Redundant fan power supply

Optional standby exciter

### RF Output Power

Analog mode:

150 W to 5500 W into a 1.2 VSWR

150 W to 5000 W into a 1.5 VSWR

HD Radio™ Hybrid Mode (-20 dB):

4000 W into a 1.2 VSWR

3650 W into a 1.5 VSWR

HD Radio™ Hybrid Mode (-10 dB):

2200 W into a 1.2 VSWR

2000 W into a 1.5 VSWR

HD Radio™ Digital mode:

1500 W into a 1.2 VSWR

1400 W into a 1.5 VSWR

### RF Output Connection

1-5/8 inch EIA, female (standard)

3-1/8 inch EIA, female (optional)

7/8 inch EIA, female (optional)

### RF Output Impedance

50 ohms unbalanced

### Efficiency

Analog Mode:

64% typical at 5000 W

HD Radio™ Hybrid Mode (-20dB):

55% typical at 3650 W

HD Radio™ Hybrid Mode (-10dB):

40% typical at 2000 W

HD Radio™ Digital Mode:

33% typical at 1400 W

### RF Load VSWR

1.5:1 with 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 20 dB

### Spurious and Harmonic

Meets or exceeds all FCC/IC/CE requirements



PRELIMINARY SPECIFICATIONS SUBJECT  
TO CHANGE WITHOUT NOTICE

## AC INPUT

### Voltage

180 V ac to 264 V ac, 3 phase, 50/60 Hz  
312 V ac to 457 V ac, 3 phase, 50/60 Hz  
180 V ac to 264 V ac, 1 phase, 50/60 Hz

### Power Consumption

#### Analog mode:

7810 W at 5000 W RF output (7.89 kVA)

HD Radio™ Hybrid Mode (-20dB)

6640 W at 3650 W RF output (6.71 kVA)

HD Radio™ Hybrid Mode (-10dB):

5000 W at 2000 W RF output (5.04 kVA)

HD Radio™ Digital Mode:

4240 W at 1400 W RF output (4.29 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

425 m<sup>3</sup>/hr (250 cfm)

## PHYSICAL

### Dimensions

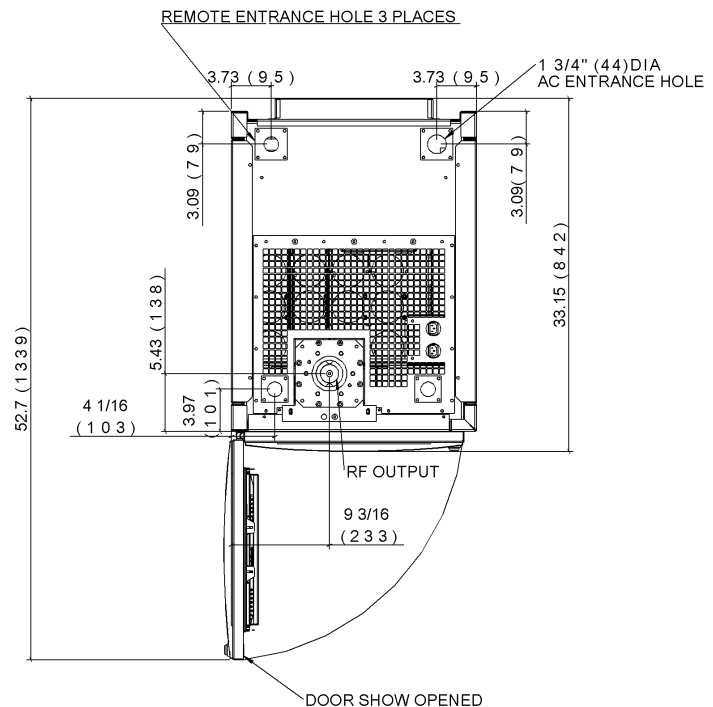
Open ventilation configuration:  
184.2 cm H x 58.4 cm W x 81.3 cm D  
(72.5" H x 23" W x 32" D)

Note: total depth 84.2 cm (33.1") with air filters fitted

Closed ventilation configuration:  
consult factory

### Weight

136 kg (300 lbs)



SPECIFICATIONS SUBJECT TO CHANGE  
WITHOUT NOTICE



### Notes:

Specifications established at rated power unless otherwise noted.

All measurements into 50 ohm resistive load.

AC input voltage at nominal level.