

# **NV3.5**<sup>LT</sup> FM Transmitter

Making Digital Broadcasting Work

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## GENERAL

#### **Transmitter Type**

FM Broadcast, 100% solid state

## Configuration

2 hot swappable RF power modules

4 switching power supplies (2 per RF power module)

Power supplies are hot-swappable

1 low voltage power supply (same as RF power module power supply)

Integrated exciter

## **Optional**

Main/standby exciter Redundant low voltage power supply

## **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

## **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

## Frequency Stability

 $\pm 200 \text{ Hz}$ 

## **Turn Around Loss**

Better than 20 dB

## **Spurious and Harmonic**

Meets or exceeds all FCC/IC/CE requirements

# AC INPUT

#### Voltage

180 V ac to 264 V ac, 3 phase, 50/60 Hz (standard) 312 V ac to 457 V ac, 3 phase, 50/60 Hz (optional) 180 V ac to 264 V ac, 1 phase, 50/60 Hz (optional)

## **Power Consumption**

# Analog mode:

5280 W at 3750 W RF output (5390 VA)

#### **Power Factor**

Unity Power Factor Corrected (typically 0.98)

#### **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**

 $0^{\circ}$ C to  $+50^{\circ}$ 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**

680 m<sup>3</sup>/hr (400 cfm)

## PHYSICAL

#### **Dimensions**

Open ventilation configuration: 184.2 cm H x 58.4 cm W x 76.2 cm D (72.5" H x 23" W x 30" D)

Note: total depth 81.3 cm (32") with front hinged panel and air filters installed

Closed ventilation configuration: consult factory

## Weight

151 kg (333 lbs)



RF Output Power and	Analog Mode
Efficiency	(max/rated)
Analog TPO (kW)	4.15 / 3.75
Typical Efficiency	71%

Notes:

Specifications established at rated power unless otherwise noted.

All measurements int 50 ohm resistive load. AC input voltage at nominal level.