

# **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 HD Radio upgradable

## **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 ± 200 Hz

**Turn Around Loss** Better than 20 dB

Spurious and Harmonic Meets or exceeds all FCC/IC/RED requirements

## AC INPUT

#### Voltage

180 Vac to 264 Vac, 3-ph., 50/60 Hz (standard) 312 Vac to 457 Vac, 3-ph., 50/60 Hz (optional) 180 Vac to 264 Vac, 1-ph., 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

## A U D I O P E R F O R M A N C E

#### Asynchronous AM S/N Ratio

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

#### Synchronous AM S/N Ratio

Better than 50 dB below reference carrier with 100% amplitude modulation using 75 μs 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** 680 m<sup>3</sup>/hr (400 cfm)

# COMPLIANCE

Product complies with:

• ISED specification BETS6 issue 2

- FCC CFR title 47 part 2 and part 73
- Conforms with all essential requirements of Radio European Directive 2014/53/EU

## 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)



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

#### Notes:

Specifications established at rated power unless otherwise noted. All measurements into 50 ohm resistive load. AC input voltage at nominal level.