

# **NV30**<sup>LTN</sup> FM Transmitter

Making Digital Broadcasting Work

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# GENERAL

**Transmitter Type** FM Broadcast, 100% solid state

## Configuration

12 hot swappable RF power modules 24 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 supplies

**RF Output Connection** 4-1/16 inch, female (standard) 3-1/8 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/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: 45.8 kW at 33.0 kW RF output (46.8 kVA)

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** 4163 m<sup>3</sup>/hr (2450 cfm)

# PHYSICAL

#### Dimensions

Open ventilation configuration: 184.2 cm H x 129.5 cm W x 76.2 cm D (72.5" H x 51" 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 560 kg (1235 lbs)



RF Output Power and Efficiency	Analog Mode (max/rated)
Analog TPO (kW)	33 / 30
Typical Efficiency	72%

## Notes:

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