

NV20^{LT} FM Transmitter

making digital broadcasting work

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GENERAL

Transmitter Type

FM Broadcast, 100% solid state

Configuration

8 hot swappable RF power modules 16 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 HD Radio upgradable

RF Output Connection

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

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:

27.8 kW at 20.0 kW RF output (28.3 kVA)

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 μ 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 μ 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

2888 m3/hr (1700 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 91.4 cm W x 76.2 cm D (72.5" H x 36" 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

376 kg (830 lbs)



RF Output Power and Efficiency	Analog Mode (max/rated)
Analog TPO (kW)	22 / 20
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.