

NV5^{LT} FM Transmitter

making digital broadcasting work

PHONE +1.902.823.2233

FAX +1.902.823.3183

info@nautel.com

www.nautel.com

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

 \pm 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:

6940 W at 5000 W RF output (7090 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 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 m³/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)



RF Output Power and Efficiency	Analog Mode (max/rated)
Analog TPO (kW)	5.5 / 5
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.