

NV30^{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

16 hot swappable RF power modules 32 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) 4-1/16 inch, 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

Upgradability

Upgradable to the next nameplate power level with foctory firmware update

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: 42.3 kW at 30.0 kW RF output (43 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 5437 m³/hr (3200 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 165.1 cm W x 76.2 cm D (72.5" H x 66" 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 744 kg (1640 lbs)



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