# **NV**15<sup>LT</sup>

TECHNICAL SUMMARY www.nautel.com | info@nautel.com

## **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

**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/CE requirements

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

# 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: 21.1 kW at 15.0 kW RF output (21.6 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** 2888 m<sup>3</sup>/hr (1700 cfm)

## 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)	16.5 / 15
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.

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