NV30LT
UPGRADABLE

TECHNICAL SUMMARY
www.nautel.com | info@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

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

Upgradability
Upgradable to the next nameplate power level with factory firmware update

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:
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

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
5437 m^3/hr (3200 cfm)

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

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.

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