V5 (Hybrid FM • Digital HD Radio mode) Pre-installation Summary Sheet
Mechanical, Electrical, and Cooling Data

Electrical			
Nominal output power	3,500 W		
Output power range	550 W to 3,800 W		
Power consumption	7,000 W at 3,500 W		
AC power factor	Unity Power Factor Corrected (typically 0.99)		
Overall efficiency, AC input to RF output	50% typical		
Transmitter AC input configuration	3-phase, 3 wire, plus safety ground. 1-phase, 2 wire, plus safety ground.		
AC input voltage	208 V 3-phase	380 V 3-phase	220 V 1-phase
AC fuse & conductor size	Consult local electrical codes		
Total line amps at nominal modulation	21	12	34
AC entrances*	Terminals at rear, center of cabinet. For top or bottom entry, use existing holes.		
Grounding / earthing	The site must contain a station reference ground, as defined in Nautel's *Recommendations for Transmitter Site Preparation* booklet. This ground must provide a continuous, low impedance path to the earth. The transmitter cabinet's designated reference ground point, the shield of the coaxial feed cable, and the ground connection of the power source's surge protection devices must be connected directly to the station reference ground using, as a minimum, four-inch (100 mm) copper strap**.**		

Cooling	
Cooling air volume	435 cfm (739 m^3/h)
Air flushing*†	Fans at the rear of each RF power module and at the front of each power supply module draw cooling air from the rear of the transmitter and exhausts through the front of the transmitter. For open ventilation systems, air from the RF power modules exhausts at the top front of the compartment, while air from the switching power supply modules exhausts at the bottom of the front door.
Heat dissipation	3,500 W at 3,500 W (11,945 Btu/hr)
Air conditioning load	1 ton at 3,500 W

Mechanical	
Dimensions	Transmitter Cabinet: 184.5 cm H x 58.5 cm W x 87.8 cm D (72.5" H x 23" W x 34.5" D)
Weight	205 kg (450 lbs)
RF output connector	1 $^5/_8$ inch EIA flange, female (3 $^1/_8$ inch and $^7/_8$ inch available)
Remote control connections*	Top front center of cabinet.

* As viewed from front of transmitter
† Closed ventilation systems available upon request.

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