



V10 (Hybrid FM • Digital HD Radio™ Mode) Pre-installation Summary Sheet

Mechanical, Electrical, and Cooling Data

| Electrical | | | |
|---|--|---------------|--------------|
| Nominal output power | 7,000 W | | |
| Output power range | 1,000 W to 7,700 W | | |
| Power consumption | 14,000 W at 7 kW | | |
| AC power factor | Unity Power Factor Connected (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 1phase |
| AC fuse & conductor size | Consult local electrical codes | | |
| Total line amps at nominal modulation | 42 | 23 | 68 |
| 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 <i>Recommendations for Transmitter Site Preparation</i> 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 | 930 cfm (1,580 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 | 7,000 W at 7 kW (23,891 Btu/hr) |
| Air conditioning load | 2 ton at 7 kW |

| Mechanical | |
|-----------------------------|---|
| Dimensions | Transmitter Cabinet: 184.5 cm H x 81.3 cm W x 87.8 cm D (72.5" H x 32" W x 34.5" D) |
| Weight | 263 kg (580 lbs) |
| RF output connector | 3 1/8 inch EIA flange, female (1 5/8 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.