



## Q20 Pre-installation Summary Sheet

### Mechanical, Electrical, and Cooling Data

Electrical			
Nominal output power	20,000 W		
Output power range	3,000 W to 22,000 W		
Power consumption	29,412 W at 20 kW		
AC power factor	0.93		
Overall efficiency, AC input to RF output	68% typical		
Transmitter AC input configuration	3-phase, 3 wire WYE plus safety ground. Single 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 output	88	48	144
AC entrances *	Terminals on rear, right-hand side of the 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	3,910 m <sup>3</sup> /h (2,300 cfm)
Air flushing *	Open ventilation configuration: Air is drawn from room through filtered rear doors, passes through power supply / RF modules, and is exhausted at roof near the front of cabinet.
Heat dissipation	9,412 W at 20 kW (32,123 Btu/hr)
Air conditioning load	2.68 ton at 20 kW

Mechanical	
Dimensions	H 201.2 cm (79.2") x W 118.2 cm (46.5") x D 118.4 cm (46.6"), 1 cabinet  Includes RF output connection. Add 12" to depth for optional air intake plenum. For shipping and installation purposes, transmitter cabinet can be separated into smaller racks. See brochure for open and closed air configuration dimensions. Single phase has external choke.
Weight	545 kg (1,202 lbs)
RF output connector	3 1/8 inch EIA flange, female
Remote control connections	Control board: upper inner left side of cabinet. Display board: on back of door.

\* As viewed from front of transmitter.