

4MX 25 - Technical Specifications : Technical Specifications

RF SPECS

Output Power:**Range:**

250 W to 27.5 kW

Accuracy:

±2%

Efficiency:

85% at 25 kW RF output; 86% typical

VSWR:

1.2:1 or better at rated power

Impedance:

50 Ohm

Frequency:**Range:**

531 kHz to 1700 kHz, supplied on frequency, as ordered; 9 kHz or 10 kHz channel spacing

Stability:

±2.5ppm, 0 to 50° C

Spurious & Harmonic:

80 dB; Meets or exceeds FCC and other world standards

Modulation:**Type:**

Patented 4M Modulation exciter

Capabilities:

>145% peak positive capability at 27.5 kW output power into 50 Ohm load

Carrier Shift:

<1% at 95% negative modulation at 1 kHz

Regulatory:

Meets or exceeds FCC and DOC technical requirements, meets ENG0215 safety requirements

AM AUDIO SPECS (ALL AUDIO SPECIFICATIONS ARE AT RATED POWER)

Analog:**Modes:**

Mono, HD Radio with external ASi 10

Connector Type:

Terminal block

Input Level:

-10 dBm to +10 dBm; electronically adjustable

Impedance:

600 Ohm, balanced

Amplitude Response:

+0.1/-0.25 dB; 20 Hz to 10 kHz

THD + Noise:

0.5% or less; 20 Hz to 10 kHz

Intermodulation Distortion:

0.5% or less; 1:1 ratio

Transient Intermodulation Distortion:

0.5% or less; 4:1 ratio

Incidental Phase Modulation:

Tomorrow's Radio Today

Broadcast Electronics

Technical Specifications

40 dB @ 1 kHz

Signal to Noise Ratio:

-70 dB or better

Squarewave Overshoot:

0.1% or less at 400 Hz

Squarewave Tilt:

0.5% or less at 40 Hz

AES:

Modes:

Mono L+R, HD Radio with external ASi 10

Connector Type:

Terminal block

Input Level:

0 dBFS to -20 dBFS; electronically adjustable

Impedance:

110 Ohm, balanced

Amplitude Response:

+0.1/-0.25 dB; 20 Hz to 10 kHz

THD + Noise:

0.5% or less; 20 hz to 10 kHz

Intermodulation Distortion:

0.5% or less; 1:1 ratio

Transient Intermodulation Distortion:

0.5% or less; 4:1 ratio

Incidental Phase Modulation:

40 dB @ 1kHz

Signal to Noise Ratio:

-70 dB or better

Squarewave Overshoot:

0.1% or less at 400 Hz

Squarewave Tilt:

0.5% or less at 40 Hz

MECHANICAL & PHYSICAL

Size/Unpacked:

45" W x 35" D x 87" H

Weight/Unpacked:

825 lbs (375 kg)

Cooling Air Requirements:

Filtered air inlet at lower rear of cabinet, 3000 ft³/min (85.0 m³/min)

Heat Dissipation:

@ 25 kW, 0% modulation:

4.8 kW (16,382 BTU/hr)

@ 25 kW, 100% tone modulation:

7.1 kW (24,232 BTU/hr)

Air Conditioning Sizing:

@ 25 kW, 100% Tone Modulation:

2.02 ton

RF Output Connector:

3-1/8" EIA Flange, 50 Ohm



ENVIRONMENTAL

Temperature:

0° to 50° C

Altitude:

10,000 ft (3,048 M)

Humidity:

0% to 95% (non-condensing)

ELECTRICAL

AC Input Voltage:**3-Phase Closed Delta:**

230 VAC (192-265 VAC), 50/60 Hz

3-Phase WYE 3 Wire:

230 VAC (192-265 VAC), 50/60 Hz

3-Phase WYE 4 Wire:

400 VAC (332-460 VAC), 50/60 Hz

Disconnect Size**@ 230 VAC, 27.5 kW, 100% Tone Modulation:**

125 A (see Installation Notes Figure 1)

@ 400 VAC, 27.5 kW, 100% Tone Modulation:

75 A (see Installation Notes Figure 1)

AC Wire Size:**@ 230 VAC, 27.5 kW, 100% Tone Modulation:**

1 AWG - 1/0 AWG (see Installation Notes Figure 1)

@ 400 VAC, 27.5 kW, 100% Tone Modulation:

4 AWG - 3 AWG (see Installation Notes Figure 1)

Current Draw:**@ 230 VAC (192-265 VAC) input, 27.5 kW, 100% Tone Modulation:**

120 A per phase (see Installation Notes Figure 1)

@ 400 VAC (332-460 VAC) input, 27.5 kW, 100% Tone Modulation:

69 A per phase (see Installation Notes Figure 1)

AC Power Consumption:**@ 25 kW RF Output Power, 0% Modulation:**

29.8 kW

@ 37.5 kW RF Output Power, 100% Tone Modulation:

44.6 kW

Power Factor:

0.99 or better at full load

Surge Protection:

External surge suppressor supplied

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

