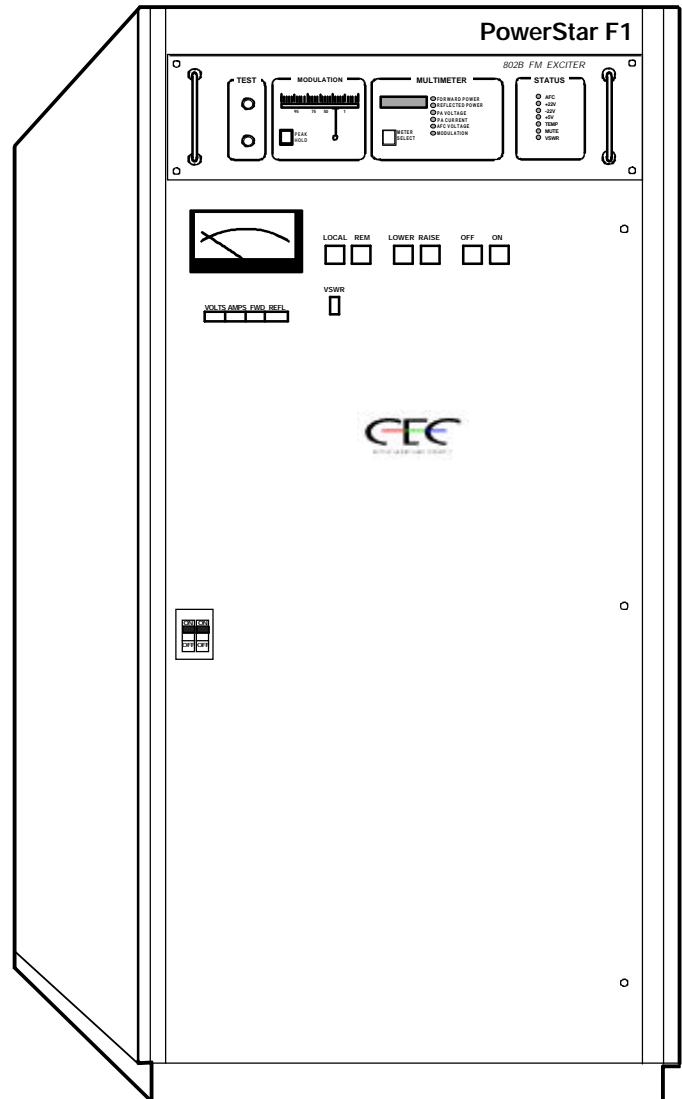


Star Features:

- ★ Reliability by Design
- ★ Self-Contained
- ★ Simple Installation
- ★ Remote Controllable
- ★ Adjustable Output Power
- ★ Step-Start Power-Up
- ★ Positive Pressure Cabinet
- ★ 24-hour Parts and Technical Support



98G0327A



CONTINENTAL ELECTRONICS CORPORATION

Solid State, 1 kW Broadband FM Transmitter

Field Proven

The PowerStar F1, solid-state, broadband, 1 kW, FM transmitter contains an internal single phase power supply and a power amplifier made up of four identical, interchangeable, hot pluggable, 400 Watt RF amplifiers with a hybrid combiner.

Broadband Design

Because the PowerStar F1 has no tuning adjustments, it is perfect for "n+1" operation, where one transmitter can serve as a standby transmitter for a group of transmitters. Broadband transmitters also offer the highest possible transmission fidelity.

Remote Controllable

The PowerStar F1 may be remote controlled by a conventional remote control system. All metering parameters are available for remote metering, including amplifier voltage, total current, and forward and reflected power.

Globally Qualified

Harmonic content of the PowerStar F1 meets or exceeds world wide requirements. The power supply is designed for 50 Hz operation and features step-start turn-on with no inrush problems.

Compact and Portable

The PowerStar F1 is housed in a single RFI shielded cabinet with a small footprint just 21.8" (55.372 cm) wide, 25.5" (67.770 cm) deep, and 42" (106.680 cm) tall.

PowerStar F1 Specifications

★ ELECTRICAL

Power Requirements:	240 Vac, 50 or 60 Hz, single-phase.
Power Consumption:	2.2 kW at 0.8 power factor.
RF Power Output:	1,050 Watts, adjustable between 250 and 1,050 Watts.
Frequency Range:	88 to 108 MHz.
Exciter:	Continental 802D-1 or 802B.
Output Impedance:	50 Ohms unbalanced, 2:1 VSWR maximum, short and open circuit protection.
Output Connector:	N-Type female connector.
Remote Control:	Accepts conventional digital or analog remote control system.
RF Harmonics and Spurious:	Better than -80 dB below carrier, meets or exceeds FCC and DOC.

★ AUDIO PERFORMANCE

NOTE: The modulation-oriented specifications for the PowerStar F1, including frequency stability, are determined by the associated exciter. The following specifications result from using the Continental Type 802B FM Exciter.

Monaural Operation:	
FM Noise:	75 dB below +75 kHz at 400 Hz with 75 microsecond de-emphasis.
Asynchronous AM Noise:	62 dB below carrier; reference: 100% AM at 400 Hz with 75 microsecond de-emphasis, no FM modulation.
Synchronous AM Noise:	60 dB below carrier; reference: 100% AM at 400 Hz with 75 microsecond de-emphasis, FM modulation +75 kHz at 400 Hz.
Stereo Operation:	
Amplitude Response:	+0.2 dB, 20 Hz to 100 kHz referenced to 0 dB at 400 Hz.
Input Level:	1.25 volts RMS (3.53 volts peak-to-peak for 75 kHz deviation).
Input Impedance:	500 Ohms, nominal.
Composite Inputs:	Balanced, Unbalanced, and Test.
SCA Operation:	
SCA Inputs (three):	Unbalanced (Adjustable).
Input Impedance:	15,000 Ohms nominal.
Input Level:	1.25 volts RMS (3.54 volts peak-to-peak for 10% injection).
Frequency Range:	20 kHz to 100 kHz; RDS/RDBS is accommodated.

★ MECHANICAL

Weight:	400 pounds (180 kg)
Size:	
Width:	21.8 in. (55.372 cm)
Depth:	25.5 in. (67.770 cm)
Height:	42 in. (106.680 cm)

★ ENVIRONMENTAL

Ambient temperature:	-4 to +113 degrees F (-20 to +45 degrees C)
Relative Humidity:	0 to 95% non-condensing
Altitude:	0 to 10,000 ft. (3,046 m)

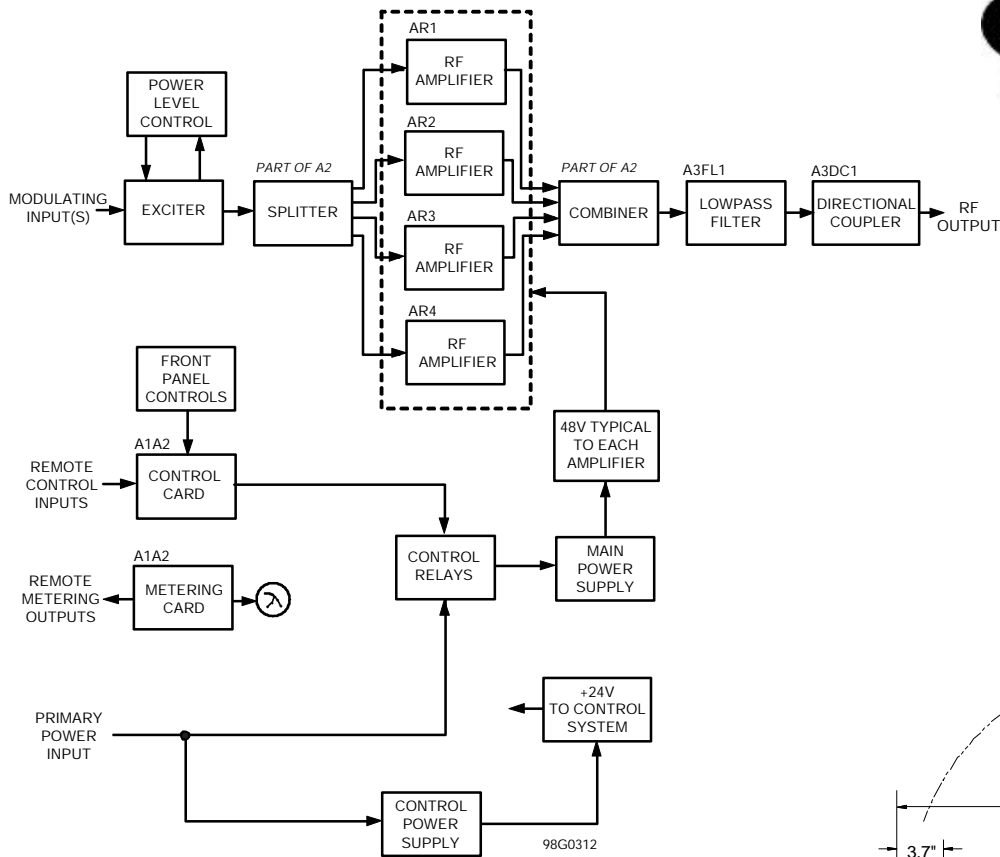


Figure 1. PowerStar F1 Block Diagram.

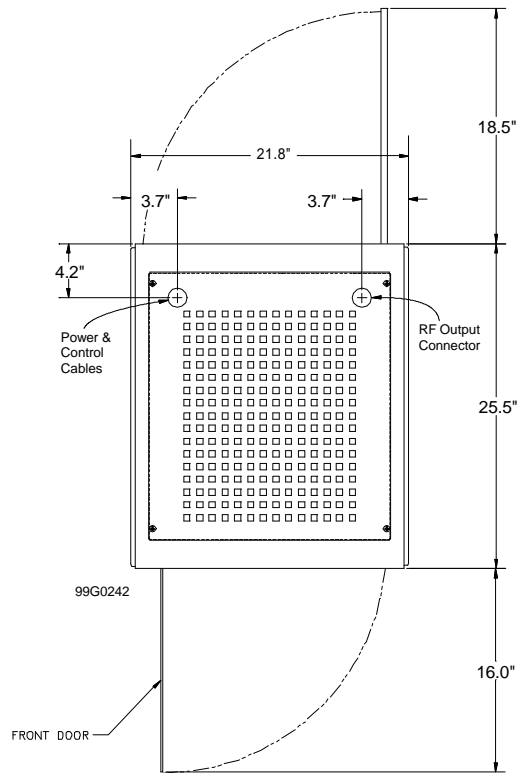


Figure 2. PowerStar F1 Footprint Diagram.

Your Local Transmitter Professional



CEC is ISO-9000 Certified