

Legend
Series "C"

Medium Power Solid State FM Broadcast Transmitters

1500

Features/Benefits

Tunes As Easily As Your Car Radio: The broadband design of the Legend Series "C" makes it a perfect choice as a "Main Transmitter" or as a back up transmitter for multiple stations in a single market. Trailer mounted, it can serve as a portable emergency transmitter for group owners. Supplied with our Frequency Agile Exciters all that is needed to change frequency is to dial-in the desired frequency on the Exciter Front Panel.

Built-In Redundancy: "Hot-pluggable" 500 watt drawers can be safely removed or inserted while the Legend is On The Air. The transmitter will continue to operate at reduced power even with a PA drawer removed.

VSWR Foldback/Temperature Protection: Each mosfet utilized in the transmitter is protected by its own thermal protection circuitry. In addition each 500 W amplifier is also protected by a VSWR foldback circuit.

Commonly Available Parts: Built with your best interest in mind, the Legend Series "C", like all Energy-Onix Transmitters, is designed for years of reliable service and utilizes commonly available parts. On those rare occasions when parts replacement is necessary, you have control of where parts are purchased. This will allow you to shop local part suppliers for the best price. It also will speed replacement time putting you back at full power much sooner than you would be if you had to wait for high price, single source, proprietary items. Should you choose to purchase parts directly from us, we do offer next day delivery or next flight out service. Energy-Onix engineering department is available around the clock to assist with technical and parts support. The most important message to you is that our relationship will be a relationship you choose, not one forced on you.

100% Energy-Onix: During the past 11 years Energy-Onix has prided itself in manufacturing our own excellent quality, highly reliable, solid state modules. This legacy continues in the Legend Series "C". Our field proven design utilizes Philips BLF278 mosfets (commonly available) and is based on our years of field experience. You will benefit by owning an American made transmitter which will bring you years of "trouble free", minimum maintenance service.



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ENERGY-ONIX

The Transmitter People

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Support: At Energy-Onix you are not a number, you are a valued customer. As such, we have our engineering staff on call 24 hours a day, 7 days a week to assist with technical questions or situations which might occur.

Design Philosophy: The Legend Series “C” is built utilizing a “building block approach”. The basic building block is a conservatively rated 500 W PA drawer. These PA’s are then combined together to achieve the rated transmitter power output.

Internally each PA contains two BLF278 mosfets mounted on copper plates, which in turn are mounted on a massive heat sink. This system of heat dissipation along with our exhaust fans ensure cool operating temperatures for extended life.

6-8 watts of RF drive is required to achieve the 500 W PA output with each device output being combined by a 2:1 combiner. The outputs of all 3 broadband amplifiers are combined in the final “output combiner”.

Air Circulation: Cooling is achieved by having filtered air enter the cabinet through the rear filtered panels. This air is forced by independent muffin fans to pass through the fins of the heat sinks upon which the mosfets are mounted. This air is then forced out of the front of the chassis into the exhaust air plenum formed by the front “see through” door, and exhausted out of the cabinet by fans

located on the rear door.

Power Supply: The Legend 1500 “C” is powered by self contained switching supplies. Two 48 volt supplies are in each 500 W amplifier drawer.

Control System: The Legend Series “C” has a straight forward, easy to use control system. Your Legend Transmitter can be started by local or remote control. Simply initiate the start button and within seconds you will be on the air.

Circuit Breaker & Fuse Protection: Each Legend System contains a circuit breaker panel for the incoming AC power as well as independent fuses for the independent power amplifiers. Front panel indicator lights describe the status of all fuses.

Monitoring: The Legend Series “C” has monitoring available of all transmitter parameters. Individual pallet current and combiner power output is available on each 500 W drawer. Overall transmitter readings for both incident and reflective power output are located on the front panel “Combiner/Controller” drawer. Status of all fuses are present on the front panels of all power supplies.

Remote Control: No special interface is required. Simply apply a momentary ground to start, stop and reset the equipment.

TECHNICAL & MECHANICAL SPECIFICATIONS

Frequency Range:	87 to 108mHz (broadband - no tuning required when used with Energy-Onix Exciters)
RF Harmonics:	At least 80db below carrier
AM Noise:	At least 60db below carrier
FM Noise:	At least 80db below 100% mod. at 400 Hz

Audio Performance:	See Exciter Specifications
Cabinet Size:	36 “ H x 23 “ W x 30” D
Cabinet Weight:	400 lb.
Power Consumption:	2.85KW @ 1.5KW Output
Line Voltage:	220 V, 50/60 hz, 1 phase
Output Flange:	7/8” EIA