



**MULTI-CHANNEL  
HIGH-PERFORMANCE  
MC-PA SERIES  
RF TRANSCEIVER**

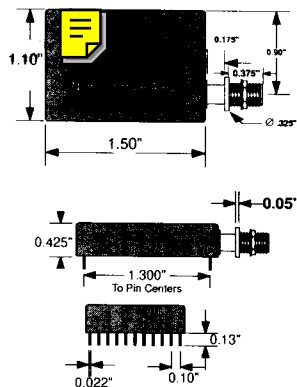


## MC-PA SERIES TRANSCEIVER MODULE DESIGN GUIDE

### Description

The PA version of Linx's popular MC Series greatly reduces the time and expense of making a product wireless. This is because the transceiver module is pre-approved by the FCC when used with the appropriate proprietary antennas. The TC-900-MC-PA transceiver module is designed for the high-performance bi-directional transfer of wireless data. The transceiver features 250 selectable channels and is capable of transmitting serial data at rates up to 150Kbps. Manual or serial channel selection modes are available. Utilizing an advanced synthesized superhet architecture, the module provides a direct serial data interface, fully qualified UART-compatible data output, RSSI, very low power consumption, wide operational voltage, on-board TX/RX switch, SAW front-end filter, and many other useful features. The open serial interface and fast turnaround times eliminate the code balancing, packetizing and latency issues found in other products. Housed in a compact through-hole package, the transceiver requires no tuning or external RF components (except antenna), allowing for straightforward application.

### Package Outline



### Features

- FCC precertified for immediate integration
- Precision VCXO synthesized architecture
- 8 Parallel or 250 Serially selectable channels
- High data rate: 2,400-150,000bps
- Transparent logic-level serial input
- UART-compatible data output
- Qualified data output
- Single antenna (No TX/RX switch required)
- FCC compatible output power and harmonics
- Differential LO for low unintended radiation
- TX power programmable with external resistor
- Excellent sensitivity (-93dBm typical at 10-5 BER)
- SAW front-end for superior out-of-band rejection
- RSSI (Received signal strength indication)
- Fast start-up and turnaround time
- Wide input-voltage range (2.7 to 12 VDC)
- Very low power consumption (as low as 12 mA)
- Power-down mode

### Applications

- Small Area Networks
- Wireless RS:232/485 Modems
- General Data Transfer
- Compressed Digital Audio/Video
- Remote Control W/ Confirmation
- Telemetry
- Data Collection
- Home/Industrial Automation
- Long-Range RFID
- Robotics
- Wire Elimination

### ORDERING INFORMATION

PART #	DESCRIPTION
TC-900-MC-P	MC Series Transceiver DIP Pkg.
TC-900-MC-PA	MC Series Transceiver DIP Pkg. FCC Preapproved
MDEV-900-MC-PA	Master Development System

☐ Not covered in this manual