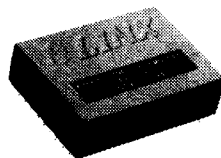




HIGH-PERFORMANCE
SC SERIES
PRE-CERTIFIED
RF TRANSCEIVER



SC SERIES TRANSCEIVER MODULE DESIGN GUIDE

**DRAFT FOR FCC SUBMISSION DO NOT DISTRIBUTE UNTIL
APPROVAL IS GRANTED AND DOCUMENT CONTROL HAS
RELEASED!**

DESCRIPTION:

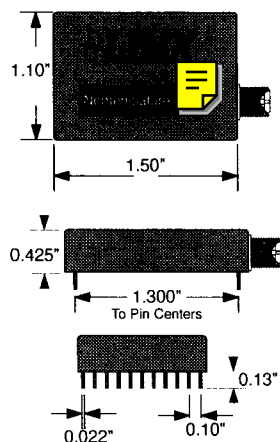
The TC-XXX-SC-PQ transceiver module is designed for the cost-effective, bi-directional transfer of wireless information. The transceiver is completely self-contained and requires no external RF components. The PQ version of the SC has been previously qualified as a modular product when used with the appropriate proprietary antennas. This greatly reduces the time to market and cost of product introduction. The Transceiver utilizes an advanced synthesized superhet architecture and has direct interface for analog or digital information, fully qualified UART-compatible data output, RSSI, low power consumption, wide operational voltage, on-board TX/RX switch, SAW front-end filter, and many other useful features. Fast turnaround times, along with the support for data rates to 33.6Kbps, make the transceiver suitable for a wide range of applications.

FEATURES

- Precision crystal-controlled synthesized architecture
- Transparent serial input
- UART-compatible data output
- Built-in data squelching
- High data-rate: 33,600bps
- Can transmit intercom-quality audio
- Single antenna ready (No TX/RX switch required)
- Output power and harmonics are compatible with FCC regulations
- Differential LO dramatically reduces unintended radiation
- Output power can be programmed with an external resistor
- Good sensitivity (-92dBm typical at 10^{-5} BER)
- SAW filter on front-end for superior out-of-band rejection
- Received signal strength indication
- Fast start-up and turnaround time
- Wide input voltage range (2.7 to 16 VDC)
- Very low power consumption (as low as 12 mA)
- Power-down mode - 50 μ A max (V_{CC} @ 5V)

APPLICATIONS

- Small Area Networks
- Wireless RS:232/485 Modems
- Telemetry
- Data Collection
- Home/Industrial Automation
- Long-Range RFID
- Robotics



PACKAGE OUTLINE

ORDERING INFORMATION

PART #	DESCRIPTION
TC-XXX-SC	SC Series Transceiver
XXX=433.92, 868, 916MHz	