



## PTRF-868: 868 MHz Transceiver Module

*(Similar Modules Available in 915 MHz and 433 MHz)*

### Introduction

The PTRF-868 operates in the 868 to 870 MHz band. Its design is based on the XEMICS XE1202 single chip transceiver and is capable of use in data transmission for narrowband FSK applications.

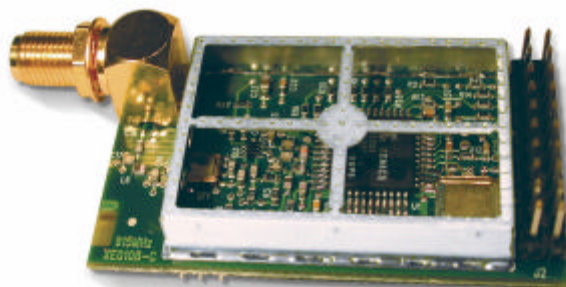
In addition to the XE1202, the module incorporates a SAW filter that is used for both transmitting and receiving, a high accuracy quartz crystal, a low-loss transmit/ receive switch and all of the carefully selected passive components necessary to get the highest performance from the XE1202.

The design is pre-certified to ETSI EN 300 220 and ETSI EN 301 489 regulations, which means that the testing that will need to be done on products incorporating this module will go much more smoothly than if you started from scratch with a design using the XE1202 integrated circuit.

The PTRF-868 works in systems with an external processor. Assistance in integration, customization, firmware development or modification, and certification is available from Pegasus Technologies.

### Features

- ?? CE Pre-Certified Radio Design
- ?? Reverse-Polarity SMA Connector
- ?? Digital Radio uP Interface
- ?? Low Cost Design
- ?? Production Ready
- ?? Bit Synchronizer
- ?? Programmable Power Output
- ?? Alignment Free
- ?? Optimized RF performance
- ?? Few External Components
- ?? Low Voltage / Low Current
- ?? Reduces Design Time



### Specifications

- ?? Frequency: 868 to 870 MHz
- ?? Modulation: FSK
- ?? Programmable Data Rates: 4.8 kbps to 76.8 kbps
- ?? Output Power: 10 dBm
- ?? Receiver Sensitivity: -111 dBm, Typical (5kHz deviation, 4.8 kbps, 10<sup>-3</sup> BER)
- ?? TX Current: 48 mA @ 10 dBm
- ?? RX Current: 16 mA
- ?? Supply Voltage 2.7 to 3.6 V
- ?? Regulatory Compliance: ETSI EN 300 220 and ETSI EN 301 489
- ?? Temperature Range: -40 to +85 C
- ?? Module Board Size: 1.102" x 2.216" x 0.315" (2.8 cm x 5.4 cm x 0.8 cm)
- ?? Weight: 0.6 oz. (18.662 g)

For a complete overview of the operation of this module, refer to the datasheet for the XE1202 transceiver integrated circuit (see [http://sss-mag.com/pdf/xe1202\\_datasheet.pdf](http://sss-mag.com/pdf/xe1202_datasheet.pdf)).

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**Specifications subject to change without notice.**