

## Operational Description

### Beacon – 40001A001

The Beacon is part of a radio frequency (RF) location system that uses the 2.4GHz Industrial, Scientific, and Medical (ISM) band. The system uses IEEE 802.15.4 compliant transceivers with a maximum throughput of 250Kbps. All transceivers use the direct sequence spread spectrum (DSSS) technique with Offset-Quadrature Phase Shift Keying (O-QPSF) modulation. The system can operate on any one of the sixteen ISM channels defined by IEEE 802.15.4.

The Beacon is powered by a battery. All RF carrier frequencies and modulation timing is derived from a 16MHz crystal connected to the RF transceiver. The Beacon contains a patch antenna which is embedded into the printed circuit board.

Refer to the User's Manual for further information.