

The PBC has 4 independent transceivers. The transceivers cannot operate as MIMO or phase array (beam shaping).

All the transceivers are connected to a single low power microprocessor unit. Each transceiver in the unit transmits its identification packet at 20% or lower duty cycle.

Each transceiver operates at a different 800KHz band (905.0, 905.8, 906.6 etc).

One of the channels (One which has the best reception from the base station) acts as a communication channel to the base station.

This unit's function is to provide location information to the mobile agents (tags). Upon packet reception, the tag transmits its signal strength (RSSI) and ID to the base station, and its location can be calculated using various algorithms.