

Operational Description of RA-R426-01

The RA-R426-01 module is a low-power radio transceiver device. It operates in the 2.4GHz ISM band and supports the Bluetooth Smart (BLE) protocol. Acting as a receiver, the module detects, identifies and collects radio payloads from compatible devices in range. Acting as a transmitter, the module emits a unique signature which can be used for geolocation and navigation.

The RA-R426-01 module is installed alone into an enclosure. The module is designed to reside inside a commercially-available New Age Enclosures S-x01210 enclosure (shown below in the S-301210 configuration) (measuring approximately 7.5cm x 3.0cm x 2.5cm). For some applications, a custom enclosure may be required, for instance to facilitate attachment to a specific type of object, or for additional environmental protection. Custom enclosures will typically have similar size, materials and construction.



The RA-R426-01 module's transmitter functionality serves to periodically transmit short messages containing tens of bytes of information: a unique identifier and typically additional payload data. The receiver functionality serves to continuously listen for similar messages originating from compatible devices in range. For most applications, the module's transceiver is disabled more than 99% of the time.