

HR-TAG-LD operational description

Tag is a unit mounted on a collar on the animal neck, used for the following:

1. Identification of animal using 2.4 GHz and/or optical unit.
2. To measure various animal parameters, process then and transmit them via 2.4 GHz.

The tag initiates transmission of 3 messages/hour by itself or upon request from ID unit.
Outdoor installation, sealed unit, powered from internal 3.6V battery.

2.4 GHz Transceiver Parameters

RF Transceiver: Atmel AT86RF233

RF Frequency: 2.405-2.480 GHz

Modulation type: QPSK

RF Channels: 5 MHz separation 16 ch

Baud Rate: 250 kBit/Sec (not configurable)

Output power: 5.2 dBm max

Antenna type: PCB Omni-directional

Antenna gain: Average 1dBi (max gain: 2.2 dBi)

Average RF data: 3 messages/hour, 1mSec/message, ~30bytes/message.