

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 2.4Ghz and/or optical unit.
2. Measure various animal parameters, Process then and transmit them via 2.4Ghz.

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.

2.2. 2.4GhZ Transceiver Parameters

RF Transceiver: Atmel AT86RF230

RF Frequency: 2.4GHz

Modulation type: QPSK

RF Channels: 16 RF Channels

Baud Rate: 250K Bit/Sec (Not configurable)

Output power: 3dBm

Antenna type: PCB Omni-directional

Antenna gain: ~1dBi (Max gain: 4dBi), for H-TAG-LD

Antenna gain: ~4dBi (Max gain: 7dBi), for HR-TAG-LD

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