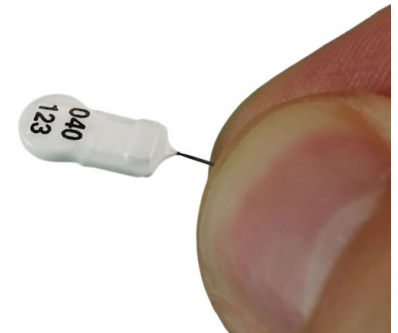# Lotek

Freshwater NanoTag Series

Technology: Radio

Product: Tag

Coded VHF Radio Transmitters

Ranging in size from 0.24g, the Lotek NanoTag represents the smallest coded VHF radio transmitter in the world today for tracking freshwater species in their natural environment.

By combining analog and digital circuitry within a single application specific integrated circuit ASIC, Lotek introduced a new level of energy efficiency, stability and reliability to the animal tracking and research community.

NanoTag permits studies of smaller species for longer periods of time, thereby reducing the impact on the species.

Options

- At 0.1s burst interval increments, for more efficient use of scan times and increased detection probability.
- Programmable for 12 hr. ON/OFF operation, to further extend operational life.
- Also available as non-coded "beeper" transmitter.

Features:

12

12hr off/on

Small size:
Small size and relatively long operational life permits monitoring the smallest species

Over 700 (Lotek 5) unique tag IDs per frequency available

Frequency tolerance to ± 500 Hz
Results in stable output power for the life of the tag

Burst interval resolution to 0.1 second:
Results in higher detection efficiency within high traffic monitoring sites

Product Applications

Salmon smolt survival studies, fish passage/guidance efficiency studies, migration timing, monitoring small amphibians and reptiles, and lamprey.

Model	NTF-1-1	NTF-2-1	NTF-3-2	NTF-5-2	NTF-6-1	NTF-6-2
Weight in air [1] (g)	0.24	0.30	0.57	1.50	2.50	4.00
Size (LxWxH) (mm)	9.6 x 5 x 3	9.6 x 3 x 5	11 x 5.2 x 5	15 x Ø 8.2	19 x Ø 9	25 x Ø 9
Life [2] (days)						
2s interval	13	20	46	89	130	246
5s interval	30	46	105	203	299	565
10s interval	52	80	185	357	525	992
40s interval	120	185	428	826	1215	2296

1. Weight includes battery pack and standard (18 cm) antenna. Stated weight in air may vary by +/-5%
2. Calculated Life is typical or average life for given model number. Calculated life for DSP500 spec (NTC only) / non-DSP500 (long-life option specified).

Technical specifications:

Frequency range: 147MHz to 168MHz

Operating temperature: 0˚C - +35˚C

Warranty

NanoTags are warrantied to be free of defects in materials and workmanship under Normal Use for a duration of 80% of Estimated Life to a Maximum of 3 years. For Warranty terms and conditions, please review our Warranty Statement.