

X-Tag Standard Rate Programming

Microwave Telemetry, Inc.
8835 Columbia 100 Pkwy, Suites K & L
Columbia, MD 21045
USA



PHYSICAL SPECIFICATIONS

Dimensions: Max. Diameter 1.3 in (3.30 cm) x Length 4.8 in (12.19 cm)

Weight (in air): ~46 grams

Antenna: 7.3 in (18.54 cm)

FEATURES

- Predefined pop-off date or deployment duration (up to 12 months)
- Calculated geolocation data
- Transmitted time-series depth and temperature data
- Transmitted daily minimum and maximum light-level data
- Emergency Depth Release (greater than ~1250 m*)
- Constant Pressure Release after 2 days*
- 15,000 Argos message transmission capacity (about 16 transmission days)
- SiV™ technology
- Temperature-compensated real-time clock
- Embedded CRC checksum with bit error detection
- Rated to 3500 psi
- Complete archived (2-minute interval, high-resolution) depth, temperature, and light-level records upon recovery and data extraction

CONSTRUCTION

Composite carbon-fiber, low-drag housing constructed with a strong tether attachment point. A polycarbonate BigEye™ nose cone encapsulates the multi-directional light sensor array, while the shape-memory alloy (NiTi) antenna provides additional durability. The PTT is then coated in a layer of anti-foulant paint to inhibit biological growth.

* Can be optimized per your requirements at time of manufacture.

GENERAL ELECTRICAL SPECIFICATIONS

Operating frequency: 401.650 MHz \pm 36 kHz

RF output power: 200 mW**

Output impedance: 50 ohms

Modulation tri-phase PSK: \pm 1.1 Rad \pm 0.1 Rad

Quiescent current: <3 μ A

Spurious emissions: -45 dB

Transmission interval: 60 seconds*

Supply voltage: 3.6–4 volts

Operating temperature range: -15–45°C

SENSORS

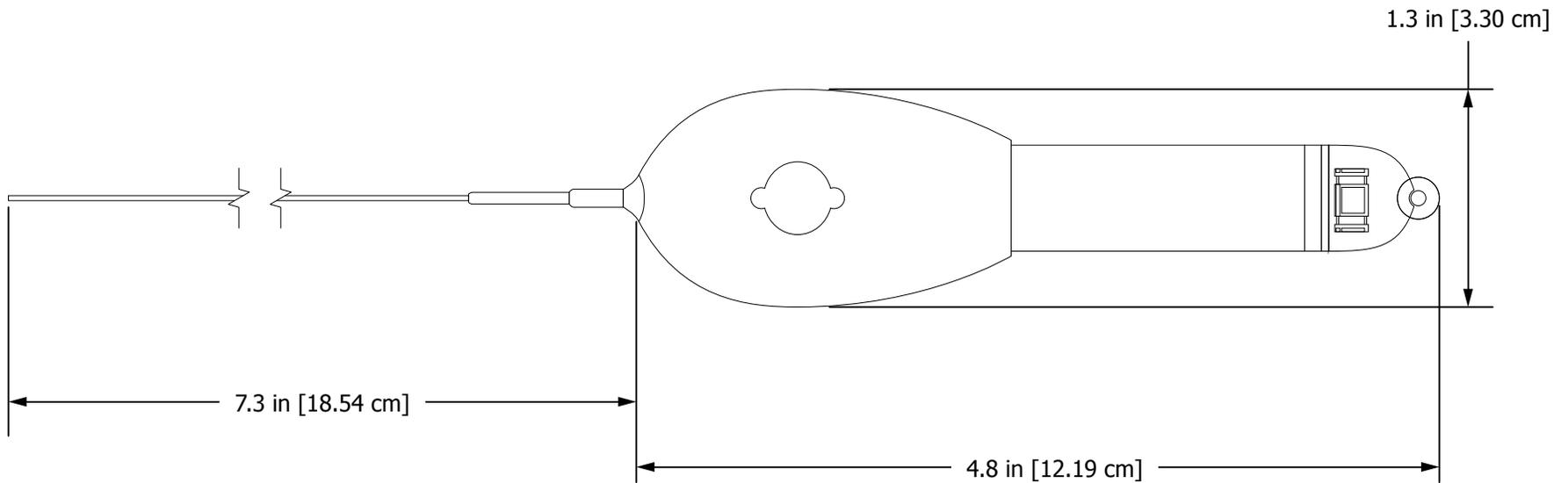
The X-Tag includes sensors to measure temperature, battery voltage, and pressure (depth). It is also equipped with multi-directional light sensors to account for tag orientation and dynamic light conditions.

Temperature range: -4–40°C (Resolution: 0.16–0.23°C)

Depth range: 0–1250 m (Resolution: 0.34–5.4 m [0.34 m archived])

Max light sensitivity: <4 x 10⁻⁵ Lux @ 555 nm

** Adjustable between 100–500 mW.



NOTE: Dimensions may vary slightly due to the individually crafted nature of these devices.

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X-Tag	
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