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| Product Image Viewer  **TIDBIT V2 Water Temperature Logger (currently in use)** | Product Image Viewer  **Tidbit MX 2204 Temperature 5000’ Data Logger (depths up to 5000’)** | Product Image Viewer  **Tidbit MX 2203 Temperature 400’ Data Logger (depths up to 400’)** |
| **Price**: $133  **Battery life**: 5 yrs  **Bluetooth transmission range:** None  **Storage space**: 42,000 measurements  **Operation range:** -20° to 70°C (-4° to 158°F) in air; maximum sustained temperature of 30°C (86°F) in water  **Accuracy:** ±0.21°C from 0° to 50°C (±0.38°F from 32° to 122°F)  **Resolution:** 0.02°C at 25°C (0.04°F at 77°F)  **Stability/Drift:**0.1°C (0.18°F)/year  Requires shuttle and software for data download/upload ($224 - $349 for base station or shuttle + software) | **Price**: $139  **Battery life**: 3 yrs with Bluetooth (BT) on, 5 yrs with Bluetooth Off Water Detect  *(Note: With BT Off Water Detect, BT will turn off when logger is in water. Loggers still need to be retrieved from the water by hand to download data.)*  **Bluetooth transmission range**: 100 ft (line of sight)  **Storage Space:** 96,000 measurements  **Operation Range**: -20° to 50°C (-4° to 122°F) in water; maximum sustained temperature in water 30°C (86°F)  **Accuracy**: ±0.25°C from -20° to 0°C (±.45°F from -4° to 32°F); ±0.2°C from 0° to 70°C (±0.36°F from 32° to 158°F)  **Resolution**: 0.01°C (0.018°F)  **Stability/Drift**: <0.1°C (0.18°F) per year  Requires free SmartPhone app for data download | **Price**: $126  **Battery life**: Same as MX2204, but battery replaceable  *(Note: With BT Off Water Detect, BT will turn off when logger is in water. Loggers still need to be retrieved from the water by hand to download data.)*  **Bluetooth transmission range**: Same as MX 2204  **Storage Space**: Same as MX2004  **Operation Range**: -20° to 70°C (-4° to 158°F) in air; -20° to 50°C (-4° to 122°F) in water  **Accuracy**: Same as MX2204  **Resolution**: Same as MX2204  **Stability/Drift**: Same as MX2204  Requires free SmartPhone app for data download |
| Pros: Makes more sense for long-term deployments, especially in more remote locations; better battery life. | Pros: Slightly improved drift and operating range (though difference is negligible), larger storage capacity, eliminates need for shuttle/software | Pros: Replaceable battery, other pros same as MX2204 |
| Cons: Requires additional shuttle or software to download data (ups cost), slightly larger drift  (negligible) and slightly reduced operating range compared to newer loggers (negligible). Requires PVC solar shield. | Cons: Shorter battery life with BT on, does not eliminate need to retrieve logger with BT off, line of sight for BT transmission. “BT Off Water Detect” does not work in freezing temperatures. May require new mounting method/protocol research (different housing). | Cons: Shorter battery life with Bluetooth on, does not eliminate need to retrieve logger with Bluetooth off, line of sight for BT transmission. May require new mounting method/protocol research due to different housing. |