

WHS3000 Series

MAP Wireless Submersible Acoustic Receivers/Dataloggers



WHS 3050

The WHS3000 series extends the limits of current practice in aquatic animal research and management. It supports the identification of multiple individuals in acoustically high noise/high multi-path environments. The system provides an efficient channel for

Key Features

- Unattended, self contained underwater data logging of BioSonics Telemetry MAP coded acoustic tags – support for 76 or 200 kHz frequency
- Compatible and complementary with field proven mobile surface tracking Lotek receivers such as the MAP600 RT-A.
- Support for tracking hundreds of active transmitters with high broadcast rates at the same time and location.
- Support for the discrimination of thousands of individual ID's on a single acoustic frequency.
- High signal discernability and reliability in acoustically noisy environments.
- Transmission of physiological data, e.g.,



WHS 3150

transmitting sensor tag data of an animal's activity and/or environment. The WHS3000 is fully compatible with BioSonics Telemetry MAP (M Series) and Multi-Mode (MM Series) transmitters.

motion, pressure and/or temperature, from multiple transmitters occupying the same spatial and temporal coverage area.

- User defined operating scheduler for optimized data collection and longevity
- Small size and weight of WHS 3050 allows handling by one person during deployment and retrieval
- Wet mateable plug for data access, configuration and control
- IEEE RS422 interface for extended cable line data transfers of 100+ meters
- User upgradeable operating system firmware
- Standalone visual pulsed light feedback of active tag detections



WHS3000 Series

Specifications

Description	Model	
	WHS3050	WHS3150
Overall Length (mm)	720	700
Diameter without mounting bracket (mm)	127	242
Weight in air without battery pack (Kg)	5	16
Weight in air with standard alkaline battery and mooring bracket (Kg)	12	32
Rated continuous operating depth (m)	50/100	300
Typical operating life (days)		
76 kHz system @ 100% schedule with alkaline battery	50	150
200 kHz system @ 100% schedule with alkaline battery	32	95

System Components

Each WHS 3000 Series datalogger consists of the following components:

Hardware

- WHS 3050 / 3150 acoustic MAP data logger with integrated hydrophone
- RS-422 Serial communication cable (requires USB to RS-422 converter for use with conventional PC I/O hardware)
- User upgradeable 256 M Byte internal SD flash data protection
- User replaceable alkaline battery pack
- Heavy duty mooring bracket with attachment hardware
- User manual

Software

- User PC MapHost software
- BioMAP Basic software (CD) and manual MapHost software for user access to WHS 3050 / 3150 functions; includes serial communication services, configuration file management, streamed data capture and an interactive virtual control panel (VCP). Active datalogging and sleep periods set by user access through the MapHost Scheduler to optimize system memory and available battery power.

PC Data Transfer Options

- Direct connect data transfer via RS422 cable & option for underwater to surface access
- RF Wireless access via floating surface buoy to shore based modem; options are:
 1. 2 way UHF radio to shore based PC
 2. 2 way Cellular to public telephone system (subject to network availability)
- Flash memory backup (BioSonics Telemetry service accessible)

