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PIT TAGS

We manufacture High Performance PIT Tags for fish and wildlife research.

These tags are encapsulated in biocompatible glass and provide 100% unique identification.





BULK FDX-B PIT TAGS Call for Price

The highest performing 134.2 kHz RFID tags on the market. Tags are sold in quanities of 100.

MiniHPT8™	8.4 mm x 1.4 mm	鮋
HPT9™	9 mm x 2.1 mm	鮋
MiniHPT10™	10.4 mm x 1.4 mm	严
GPT12™	12.5 mm x 2.1 mm	鮋
APT12™	12.5 mm x 2.1 mm	鮋
HPT23™	23 mm x 3.85 mm	陲

BULK HDX PIT TAGS Call for Price

134.2 kHz RFID tags available in a variety of sizes. Tags are sold in quanities of 100.

HDX12™	12 mm x 2.12 mm	Щ
HDX23™	23.1 mm x 3.85 mm	Ħ
HDX32™	32 mm x 3.85 mm	Ħ

Call for pricing outside the US.



PRE-LOAD STERILE TAGS

APT12 Pre-load Sterile LL MiniHPT8 Pre-load Syringe* MiniHPT10 Pre-load Syringe*

*Sold in boxes of 10

Each tag is pre-loaded in a 16 gauge needle sealed in a gas sterilized pouch that includes peel off tag code stickers for data sheets.



BIOTHERM13

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Pre-Load Sterile Syringe
Individual PIT Tags
Call for Bulk Pricing on Orders Over 500+ Tags

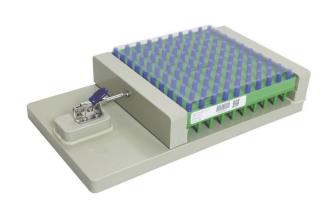
A temperature sensing transponder paired with a standard 13mm x 2.12mm FDX-B 134.2 kHz tag. Monitors temperature between 33°C to 43°C. Available in pre-load sterile syringe and bulk.



PRE-LOAD NEEDLES & TRAYS

Call for Price

Available for APT12, MiniHPT8, HPT9, GPT12, MiniHPT10, & HDX12. Each tag is pre-loaded in a needle. 100 pre-load needles per tray.



PRE-LOAD TRAY CLAMP

Firmly holds each pre-load tray in place, ideal for a tag station and mass marking.



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IMPLANTERS

1. MK25/MK65 IMPLANTER GUN

MK25 for use with APT12, GPT12, HPT9 and HDX12. MK65 for use with MiniHPT8 and MiniHPT10. MK25LL avaliable for APT12 Pre-load sterile.

2. MK15 IMPLANTER

For use with the GPT12 Pre-Load Sterile LL.

■ 3. MK10 IMPLANTER

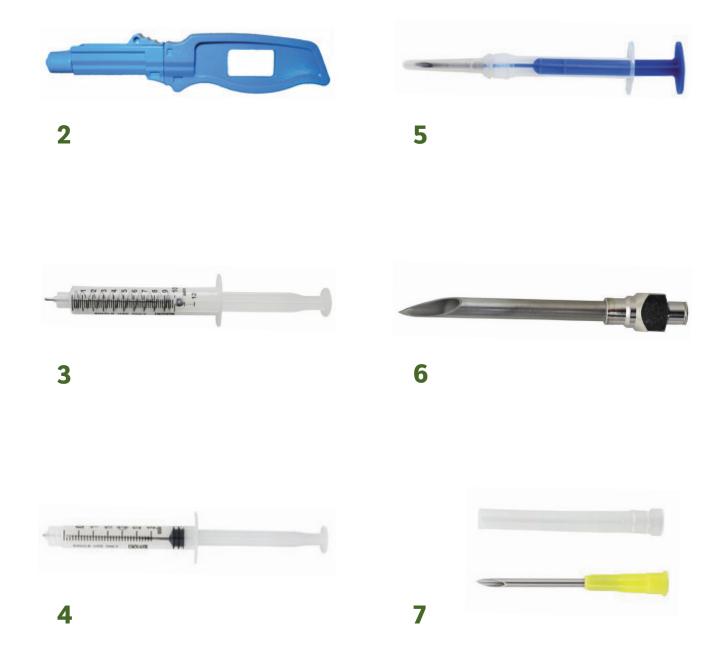
Syringe style. Corrosion resistant stainless steel spring. Requires N125 needle for the APT12, HPT9, HDX12 or the N206 needle for HPT23, HDX23 and HDX32.

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■ 4. MK165 IMPLANTER

Requires the N165 needle for the MiniHPT8 and MiniHPT10.





5. MK7 IMPLANTER

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Plastic syringe-style implanter with 1.25 inch 12 gauge non-replaceable needle. For use with the APT12, HPT9 and HDX12.

7. N125/N165 NEEDLES



N125 is a 2" long, 12 gauge needle for use with APT12, HPT9 and HDX12. The N165 is a 2" long, 16 gauge needle for use with MiniHPT8 and MiniHPT10.

6. N206 NEEDLE*



2 inches long, 6 gauge needle for use with the HPT23, $\mbox{\sc HDX23}$ and $\mbox{\sc HDX32}.$

^{*}Stainless steel replacement needles are designed for use with MK10 and MK165 implanters. Call for volume price.

TISSUE SAMPLE UNIT (TSU)

Clean, easy, & efficient collection of tissue samples.

Each TSU includes a collection vial with DNA preserver solution, stainless steel blade punch single use and a safety clip.







TSU TRAY

The stackable tray has a lid and contains 96 vials.



TSU TRAY BOX OF 100



Bulk option includes 100 units in cardboard trays.





FISH FRIENDLY APPLICATOR



The TSU applicator is used in conjunction with the TSU vial to collect the sample by cutting the tissue and sealing it into the vial.

TSU AFX LARGE APPLICATOR



The TSU AFX Large Applicator is both large and very robust, designed for heavy duty work on large adult fish or mammals.



ALUMINUM VIAL OPENER



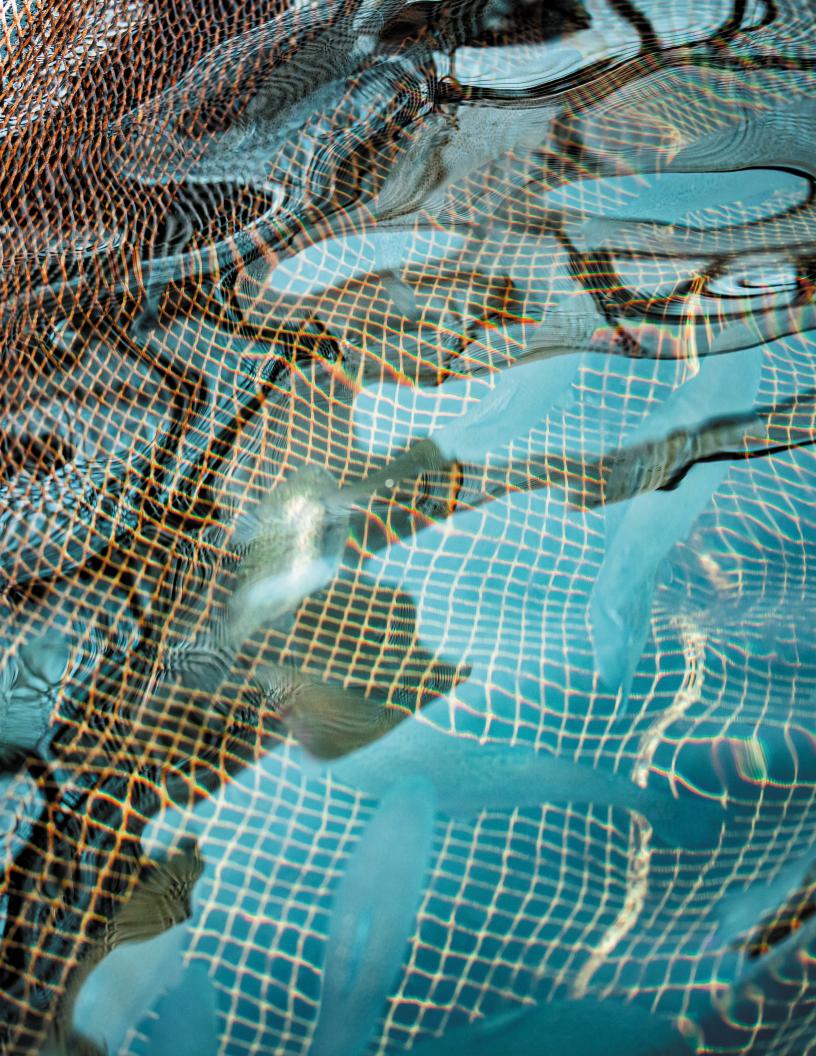
The TSU Aluminum Vial Opener is an economical option for removing the vial seal cap before extracting the sample.



ALUMINUM PLIERS



Pliers are recommended when removing the Tissue Sampling Unit (TSU) vial seal cap from a larger quantity of vials.





ELECTRONIC MEASURING BOARD

100cm Measuring Board 50cm Measuring Board 30cm Measuring Board



The EMB was designed for absolute ingress protection and ruggedness. The measurement sensor uses a cordless magnetic stylus, and connects via Bluetooth to Biomark's Data Collection Module (DCM).

Included with purchase:

- Padded soft carrying case
- AC charger
- 2 magnetic stylus pens



OHAUS DEFENDER 5000 Call for Price



- Backlit Liquid Crystal Display, 256 x 80 pixels
- Internal power supply with power cord included
- 304-grade stainless steel platform and frame
- Non-slip adjustable rubber feet
- 25 lb (12.5 kg) maximim capacity
- 20 hours battery life with rechargeable battery
- $12 \times 12, 18 \times 18, 24 \times 24$

Other scale sizes and styles available. Call for details. Both scales are modified in-house by Biomark to be able to use the scale with Biomark softwares.



SOCKET MOBILE SCANNER



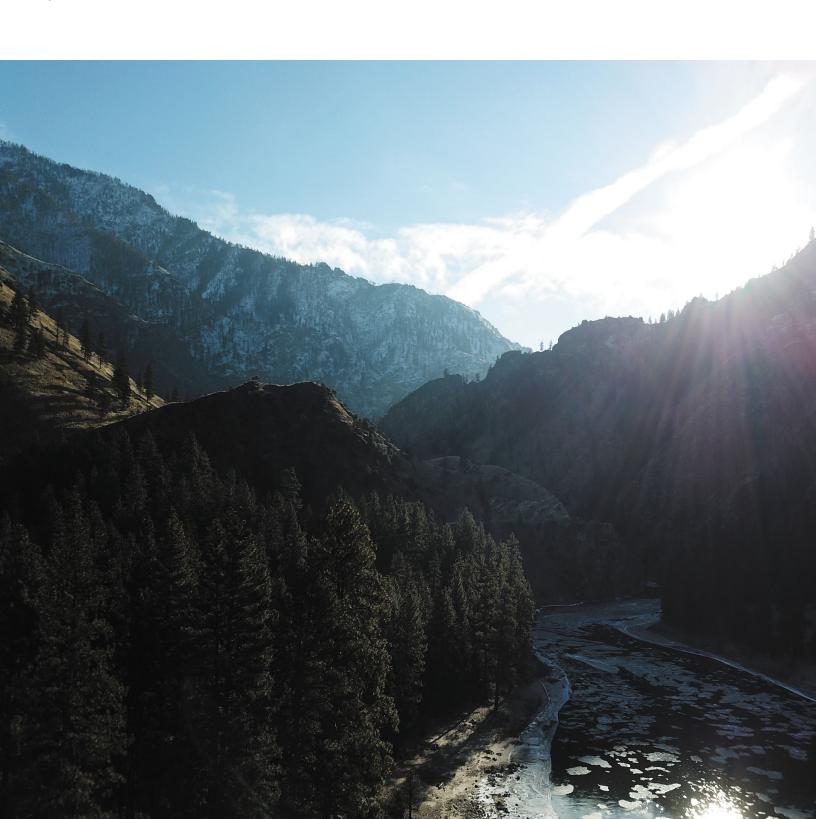
- Universal QR code reader scans 1D & 2D barcodes
- Communicates via Bluetooth
- Constructed of a highly durable, IP54 rated exterior to withstand dust and water splashes
- Antimicrobial material is easy to clean, helping protect from germs picked up with dirt in fisheries and wildlife settings

READERS

Biomark designs specialized readers for use in fisheries & wildlife applications.

Readers meet rigorous,

in-field requirements & complex remote monitoring applications. They conform to the technical specifications of ISO Standards 11784 & 11785.



HPR PLUS

Tags Read 134.2 FDX-B and HDX Memory Storage 1.6 million tag codes USB port or Bluetooth

Auto tuning Yes

Waterproof IP67 waterproof

GPS Yes

Display 24 bit color, Backlit

5.5cm x 9.5cm

Power Rechargeable battery

External Antennas Yes Volume Pricing Yes



OUT OF STOCK



HPR LITE

Tags Read All Biomark PIT tags,

Fastags, FECAVA, Trovan, UNIQUE/Manchester microchips, Avid encrypted

tags

Memory Storage 50,000 tag codes

Data Retrieval Micro USB-PC, Bluetooth

Waterproof IP67 waterproof

Shock Resistant Yes

Display LCD, Backlit

 $38 \, \text{mm} \, \text{x} \, 38 \, \text{mm}$

Power Rechargeable

Volume Pricing Yes





GPR

Tags Read All Biomark tags, FDX-B,

BioTherm13, HDX and

FDX-A

Memory Storage 3000 tag codes

Waterproof N

Display Backlit, High Contrast

56 mm x 12.7 mm

Data Retrieval Bluetooth

Power Six (6) AAA NiMH

rechargeable batteries, or alkaline batteries





HPR PLUS EXTERNAL ANTENNAS

Extend the monitoring range of the HPR Plus to meet your research needs with any of these options.



BP PLUS PORTABLE ANTENNA



A rugged, portable antenna designed for higher velocity flows and rough terrain. Features a custom, heavy duty antenna, fiberglass extralong handle, and padded harness. HPR Plus Reader required for BP Plus and Low Profile Antennas.

Features:

- Waterproof
- Pass-by antenna
- 1 year warranty



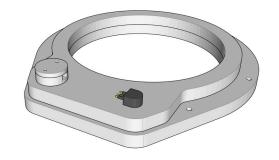
LOW-PROFILE CIRCULAR ANTENNAS

10" (25.4 cm) ID

12" (30.4 cm) ID

18" (45.7 cm) ID



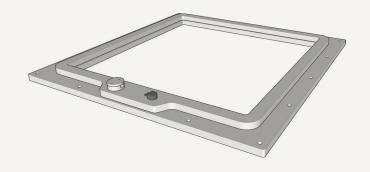


LOW-PROFILE SQUARE ANTENNAS

18" (45.7 cm) ID

24" (60.9 cm) ID

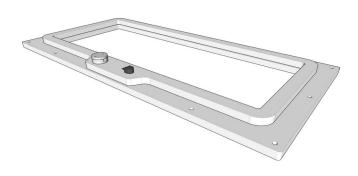




LOW-PROFILE RECTANGLE ANTENNAS

12"x24" (30.4 cm x 60.9 cm) ID 12"x32" (30.4 cm x 81.2 cm) ID





ANTENNA CABLES

Biomark offers antenna cables to extend the monitoring length of the antennas above. Not included with antenna, sold separately.

20' Antenna Cable 50' Antenna Cable



^{*}Avaliable for an IS1001 Reader. Call for price.



DEVICE MANAGER SOFTWARE

Manage your devices and easily access data.



- Change reader settings
- Download tags
- Sync the time & date to your computer
- · Update the firmware
- · Enable/disable Bluetooth
- Export as Excel, Access or TXT file
- · Erase reader memory quickly
- Filter columns

Web portal is compatible with Windows and Android. Software available for free download from www.biomark.com website.

Software License wtih Purchase of Biomark Reader





DCM DATA COLLECTION MODULE

Software application designed for streamlining data collection and data management.



The DCM custom data fields and templates can be pre-populated from a user defined list or default value and assigned constraints and validations, minimizing errors when collecting data. The software is easily customized for colleting many data points from Bluetooth accessories. Software sold seperatley and requires a yearly fee.

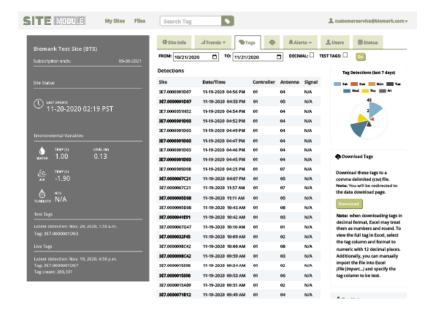
Windows 10 Rugged Tablet Version (Dell 7220) Android Rugged Tablet Version (Samsung Tab Active 2) DCM Annual Subscription

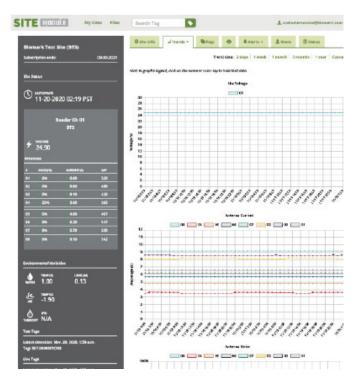


BIOLOGIC

SITE MODULE

Connects to DCM to retrieve near real-time data points that deliver status of remote PIT Tag detection sites.





Data is retrieved every 4-hrs and displayed in the BioLogic web portal. Key metrics displayed include: last tag detected, last connection, input voltage, antenna noise, current and capacitance along with other metrics such as water flow levels and temperature. In addition, the alert system notifies users via email if a site variable deviates from a specified range.

BioLogic is an effective tool for managing O&M labor and minimizing downtime; resulting in a robust dataset. Detection sites can be grouped to allow related users the ability to see where their tags are detected across a geographic region.

Standard subscription plan
Subscription with cell plan*
Subscription with satellite plan*



^{*}USA plans. International plans available.



IS1001 & ACCESSORIES

High performance, auto-tuning reader designed for low power consumption applications and high adaptability to environmental changes.





2. IS1001 MUX



NEW PRODUCT!

The IS1001 MUX is a multiplexing transceiver that connects up to six separate antennas for largescale systems. This stationary reader platform can be utilitized for instream or facility applications.



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1. IS1001 / READER 12V OR 24V

The IS1001 is a high performance reader designed for applications requiring low power consumption and high adaptability to environmental changes. It can read both FDX & HDX, ISO standard, tags.

■ 3. IS1001 MASTER CONTROLER



The MC acts as the command, control, and data collection center for the PIT-Tag monitoring system. Connect up to 12 IS1001 readers.

ACCESSORIES

Bioprobe Kit

Remote Communication Board

■ ■

BLE Data Logger



USB Data Logger



POWER OPTIONS

There are numerous power options available and vary based on the application and environment.

Power options include:

- Isolating battery switcher
- Solar power
- Thermoelectric generator
- Grid power

Call for Price



ENCLOSURES

Biomark offers an array of enclosures.

Upland electrical components are housed in metal or plastic enclosures, depending on the application and environment. Enclosures can be placed on the ground or secured to a pole or wall.

Call for Price

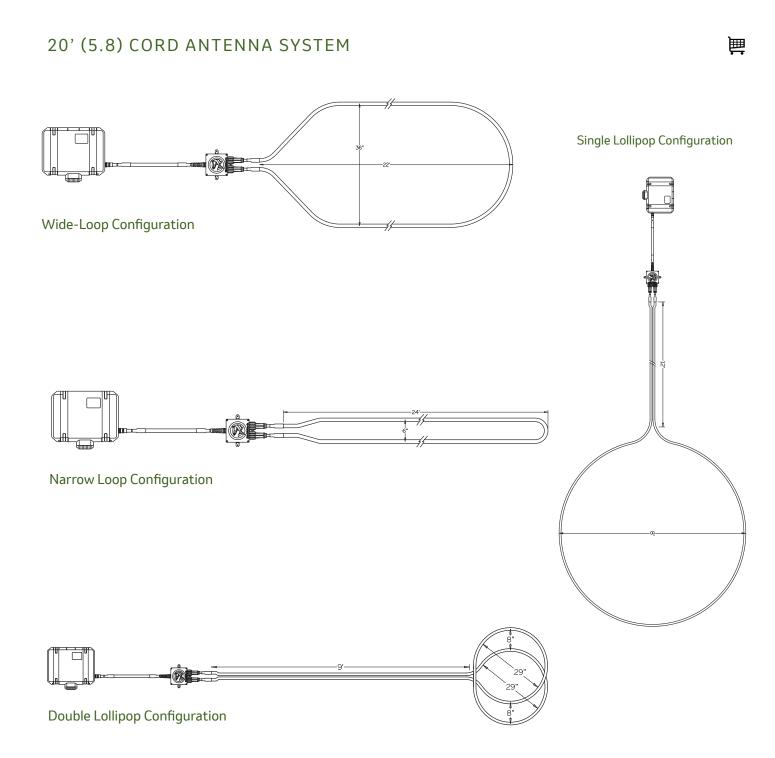




CORD ANTENNA SYSTEM

Portable PIT Tag detection system for fish and terrestrial monitoring.

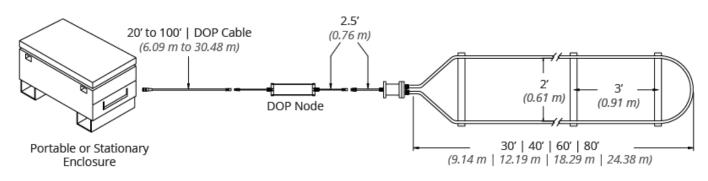
Deploy in pass-by or pass-through orientation. Includes an IS1001 reader and a flexible direct burial cable.



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LITZ CORD ANTENNA SYSTEM





The Litz Cord Antenna System is a high power, single conductor cord antenna that can be configured with the IS1001 reader housed in a shorebased enclosure or with the IS1001 in a submersible enclosure. Due to the interaction between antennas when in a pass-by orientation, the antenna can only be deployed as single standalone unit and not multiplexed or synchronized with other pass-by antennas.

Contact customer service for custom lengths or recommendations for your application needs.

LITZ CORD ANTENNA & ACCESSORIES

30' (9 m) Antenna System 40' (12 m) Antenna System 60' (18 m) Antenna System 80' (24 m) Antenna System DOP Node Serial

*Includes IS1001, DOP board, Node

Prices do not include rungs, anchors, reader or enclosure, which vary by application. Power supply/source not included. Call for price.

SMALL SCALE MONITORING SYSTEM

This single reader system is ideal for terrestrial applications, expands to connect up to 16 antennas, and can be customized for aquatic and submersible applications.



3" (17.6CM) ID



6" (15.2CM) ID



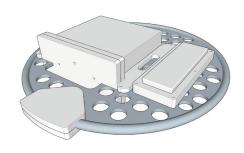
10" (25.4CM) ID

A weatherproof enclosure houses the electronic components, making it suitable for wind and rain, but not submersion. The system operates on grid or battery power and includes a Bluetooth data logger for data storage and interfacing with the reader via Biomark's Device Manager application.

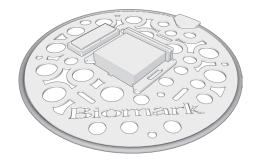
Each system can be customized to operate from 1 up to 16 antennas, of different sizes. Each antenna comes with a standard cable length of 15 m. Weatherproof case is supplied with 10' (2.5 m) DC power cable.

Small Scale Monitoring System 8
Small Scale Monitoring System 16
3" Antenna
6" Antenna
10" Antenna
6" Submersible Antenna
10" Submersible Antenna
20' (6 m) Extension Cable
50' (15 m) Extension Cable

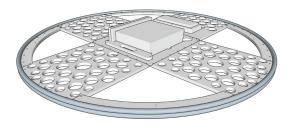
SUBMERSIBLE ANTENNA SYSTEM



3'(0.92M)



5'(1.53M)



6'(1.83M)

This fully submersible antenna system includes an IS1001 reader with Bluetooth enabled data logger. Depending on reader settings and battery pack selection, the antenna is capable of providing up to 35 days of continuous operation on a single charge and has data storage capacity of 1 million records.

Data is downloaded via Bluetooth using Biomark Device Manager software. Battery packs can be switched out in the field allowing for extended field operation. This antenna system can detect and decode ISO11784/11785, FDX-B and HDX PIT tags.

SUBMERSIBLE ANTENNA SYSTEM

3' (0.92 m) Antenna System 5' (1.53 m) Antenna System 6' (1.83 m) Antenna System 180Ah Battery (35 day run time) 230Ah Battery (52 day run time) 12V Smart Battery Charger





PIT TAG ANTENNA SYSTEM

Manufactured from durable HDPE materials. Antennas can be deployed as single antennas or in arrays.

PASS-BY ANTENNA

124' x 43" (cm x cm) OD	鮋
124' x 43" (cm x cm) OD	鮋
124' x 43" (cm x cm) OD	Ħ
124' x 43" (cm x cm) OD	■
124' x 43" (cm x cm) OD	Щ
	124' x 43" (cm x cm) OD 124' x 43" (cm x cm) OD 124' x 43" (cm x cm) OD

PASS-THROUGH ANTENNA

Typically deployed to monitor PIT tags passing through by pass channels, release pipes, and adult fishways.

Custom sizes available.

CALL FOR PRICING

IS1001 reader, enclosure, and cabling is sold separately. Contact us to learn about our system installation and maintenance programs.





FLOATING ANTENNAS

An innovative approach to both stationary and mobile PIT Tag monitoring.



RIDGID FLOATING ANTENNAS

Biomark Rigid and Inflatable Floating antennas are an innovative approach to both stationary and mobile PIT-Tag monitoring.

The Rigid antenna is made up of a HDPE antenna affixed to an FRP framework, ideal for semi-permanent, multi-antenna arrays and larger river/higher flow applications. Rigging kits are available for the antennas for affixing to overhead cable systems.

The Inflatable Floating antennas are ideal for mobile detection applications and small scale, short term monitoring projects. The unit easily deflates and rolls up into a custom duffle bag for mobility.

1. INFLATABLE FLOATING ANTEN-

Rigid Floating Antenna 10' x 4' (3m x 1.2m)

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Inflatable Floating Antenna 10' x 4' (3m x 1.2m) Ħ

ACCESSORIES

K-Pump for Inflatable Antenana



Rigid Rigging Kit

Call for Price



IS1001 Reader sold separately.

CUSTOM ANTENNA SYSTEMS

High quality, functional and reliable PIT Tag antenna systems can be custom designed.

Biomark engineers have extensive experience designing custom antenna systems for aquaculture processing facilities, hydropower facilities, and other applications. These antennas and readers are built for challenging environments and provide great detection efficiencies when combined with Biomark's high performance PIT Tags. Contact project sales for custom antenna system designs & pricing.



WORKSHOPS & TRAINING

Biomark offers technical and tagging workshops at locations all over the world.

Biomark workshops are designed to be interactive and provide customized information most relative to the group we are presenting to regardless of their experience with RFID technology and PIT systems. Each workshop includes tagging demonstrations, hands-on tagging instruction, and an introduction to antenna systems.

LEARN MORE ABOUT:

PIT Tags, Readers, Antenna Systems, System Technicalities, Tagging Technicalities, Data Collection Software, Review case studies

Interested in scheduling a PIT Tag Training? Call us today!





IDENTIFICATION SOLUTIONS

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