KarlTek™

Biomark®

PRODUCT CATALOG

—

PARTNERSHIP, TRUST & INNOVATION.
PREPARING TOGETHER FOR TOMORROW'S WATERS.
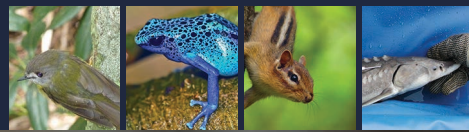
FISH AND WILDLIFE

ARE WHAT WE LIVE FOR.

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.

Mini HPT8

HPT9

Mini HTP10

APT12

HPT23

HDX12

HDX23

HDX32

BULK FDX-B PIT TAGS

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
HPT9™	9 mm x 2.1 mm
MiniHPT10™	10.4 mm x 1.4 mm
GPT12™	12.5 mm x 2.1 mm
APT12™	12.5 mm x 2.07 mm
HPT23™	23 mm x 3.85 mm

BULK HDX PIT TAGS

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
HDX23™	23 mm x 3.85 mm
HDX32™	32 mm x 3.85 mm

PRE-LOAD STERILE TAGS

APT12 Pre-load Sterile LL

MiniHPT8 Pre-load Syringe

MiniHPT10 Pre-load Syringe

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

BIOTHERM13

Pre-Load Sterile Syringe

Individual PIT 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.
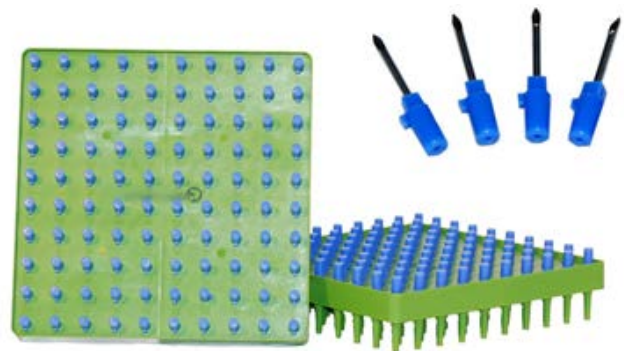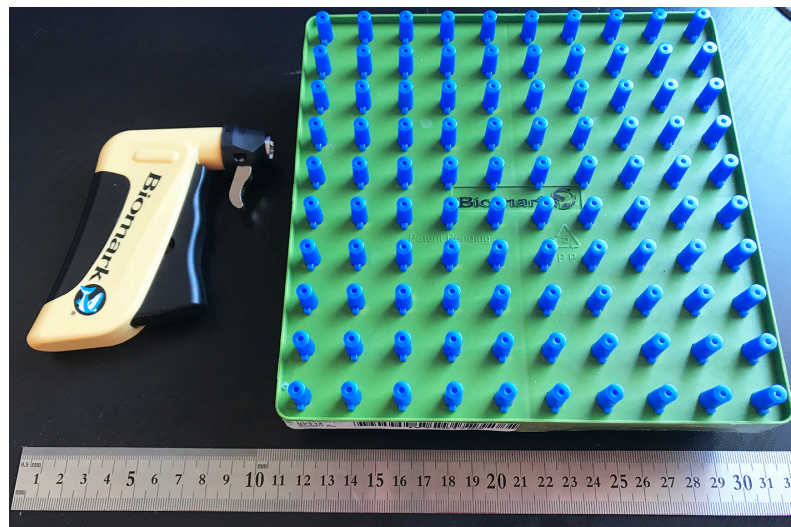

PRE-LOAD NEEDLES & TRAYS

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

IMPLANTERS

MK25 IMPLANTER GUN

MK25 for use with APT12, GPT12, HPT9 and HDX12.

MK25LL for APT12 Pre-load sterile

MK65 for HPT8 & HPT10

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.

MK165 IMPLANTER

Requires the N165 needle for the MiniHPT8 and MiniHPT10.

N206 NEEDLE

2 inches long, 6 gauge needle for use with the HPT23, HDX23 and HDX32.

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

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.

BPR 3001

Tags Read	134.2 kHz, FDX-B and HDX
Memory Storage	4GB Flash Memory
Data retrieval	USB-C port or Bluetooth
Auto tuning	Yes
Waterproof	IP67 waterproof
GPS	Yes
Display	4.3" 24 bit color
Power	Lithium Ion Battery 14.4V/48Wh
External Antennas	Yes

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 mm x 38 mm
Power	Rechargeable

BPR 3001 EXTERNAL ANTENNAS

Extend the monitoring range of the BPR 3001 to meet your research needs with any of these options.

BP V2 PORTABLE ANTENNA

A rugged, portable antenna designed for higher velocity flows and rough terrain. Features a custom, heavy duty antenna, Carbon Fiber extralong handle, and adjustable forearm brace. BPR 3001 Reader required for BP Plus and Low Profile Antennas.

Features:
- Waterproof
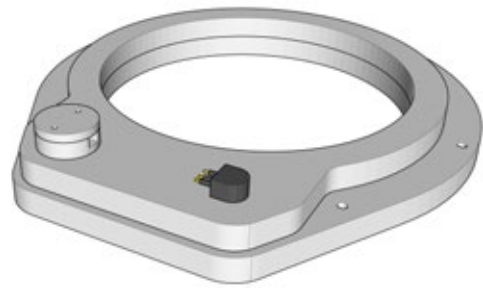- Available in dual coil version upon request
- Durable

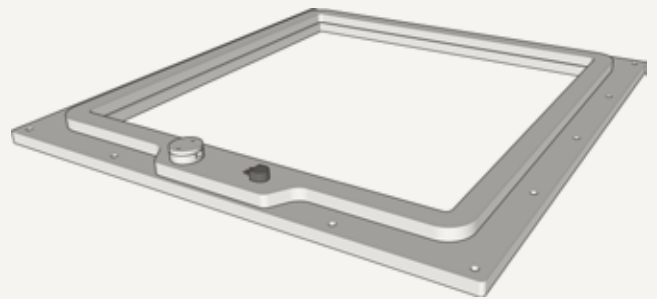## LOW-PROFILE CIRCULAR ANTENNAS

10" (25.4 cm) ID
12" (30.4 cm) ID
18" (45.7 cm) ID

LOW-PROFILE SQUARE ANTENNAS
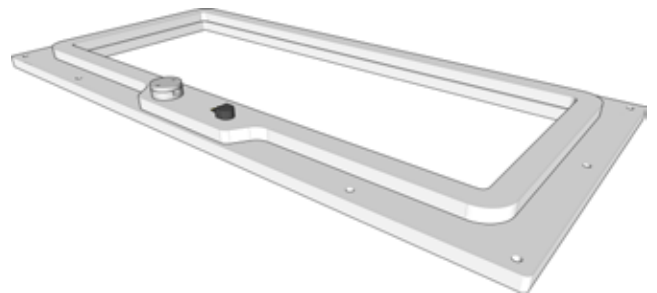
18" (45.7 cm) ID
24" (60.9 cm) ID

LOW-PROFILE RECTANGLE ANTENNAS

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

WATERPROOF LOW-PROFILE ANTENNA CABLES

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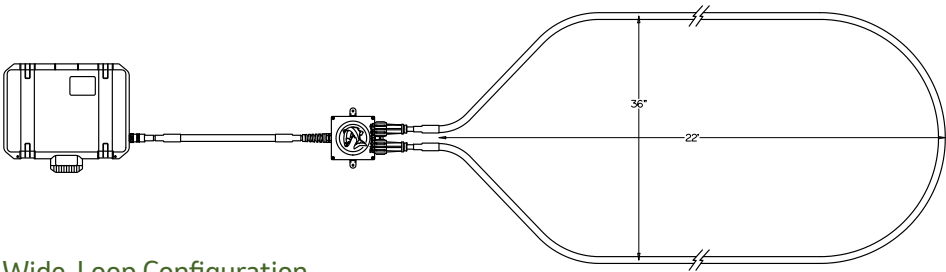antenna, sold separately.

20' Antenna Cable
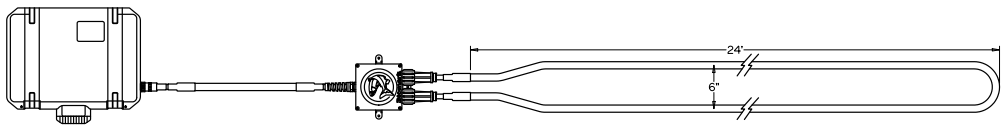50' Antenna Cable

STANDARD 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.
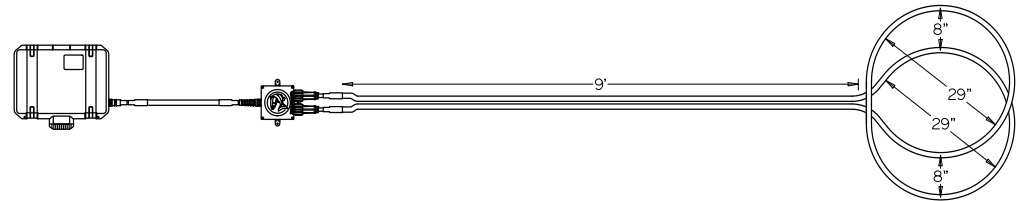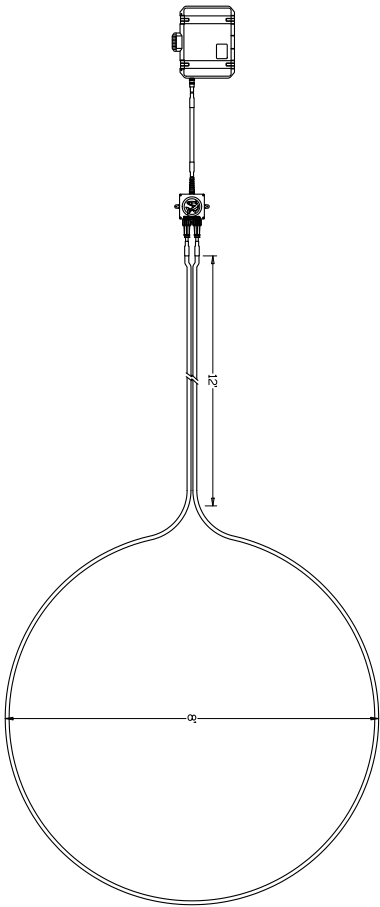
20' (5.8m) CORD ANTENNA SYSTEM
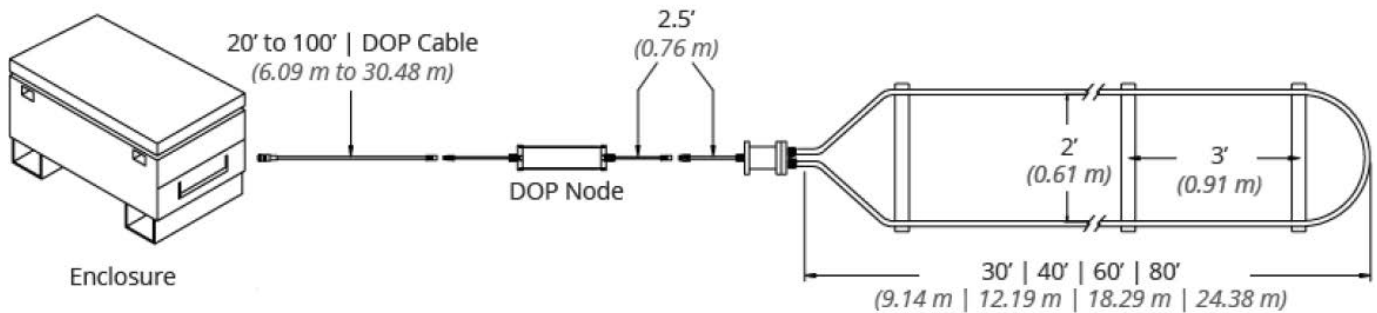

Wide-Loop Configuration

Single Lollipop Configuration

Narrow Loop Configuration

Double Lollipop Configuration

LITZ CORD ANTENNA SYSTEM

20' to 100' | DOP Cable
(6.09 m to 30.48 m)

2.5'
(0.76 m)

DOP Node

Enclosure

2'
(0.61 m)

3'
(0.91 m)

30' | 40' | 60' | 80'
(9.14 m | 12.19 m | 18.29 m | 24.38 m)

The Litz Cord Antenna System is a high power 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 KarlTek regarding advice on 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

Fixing rungs and anchors are also available

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 50' (15 m). Weatherproof case is supplied with 10' (3 m) DC power cable.
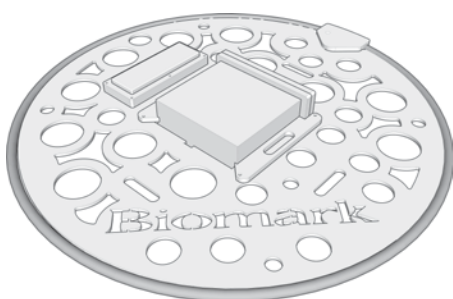
Small Scale Monitoring System 2
Small Scale Monitoring System 8
Small Scale Monitoring System 16
3" Antenna
6" Antenna
10" Antenna
6" Submersible Antenna*
10" Submersible Antenna*

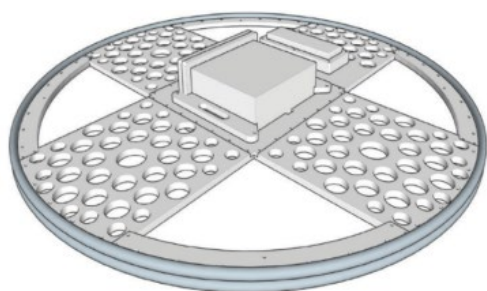*Submersible Antennas do not include cable.*

SUBMERSIBLE ANTENNA SYSTEM
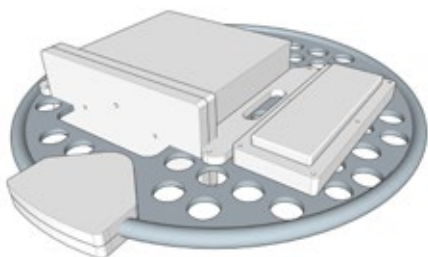
3' (0.92M)

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 42 days of continuous operation on a single charge with the 230Ah battery 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
163Ah Battery (35 day run time)
230Ah Battery (42 day run time)
12V LIFePO4 Smart Battery Charger

Additional devices required are a LIFePO4 battery pack (163Ah or 230Ah), 12V LIFePO4 smart battery charger, laptop or PC with Bluetooth capabilites, and Biomark Device Manager or BioTerm Software.

Biomark

SPECIALISTS IN

IDENTIFICATION SOLUTIONS

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