

Pipeline Pig Tracking, Signaling,  
and Communications Equipment

# Product Catalog

*Revision 12*



• Onshore • Offshore • Subsea



**CDI**

[www.pigging.com](http://www.pigging.com)  
(918) 258-6068  
[sales@pigging.com](mailto:sales@pigging.com)

**CE**  
2813



**PIGGING PRODUCTS &  
SERVICES ASSOCIATION**  
*member*

# About Our Products

CDI DESIGNS AND MANUFACTURES A WIDE VARIETY OF PIPELINE PIG LOCATING, TRACKING, AND PASSAGE DETECTION EQUIPMENT for use on land, offshore platforms, and subsea environments. Known for their durability, reliability, and ease of use, our products are in use on every continent.

SALES AND SERVICE are inseparable. Our equipment is not only sold worldwide, it is supported by an extensive dealer network and supported by our in-house technical staff.

TRAINING can be conducted here in our spacious facility in Oklahoma, USA, at your site, or online.

CUSTOM APPLICATIONS – CDI works with many oil, gas, and energy companies worldwide to design custom equipment when their requirements differ from our standard product offerings. CDI's on-site engineering and machining capability allow us to provide quick a turnaround response to product customizations. If your project demands customized equipment, CDI would be happy to work with you to realize your goals. Contact us today!

TRY BEFORE YOU BUY – Most of our products are available for rent. Rental systems which become sales receive a discount from the retail price!

WARRANTY - All CDI equipment includes a One Year Warranty\*

Information in this document is subject to change without notice and applies only to the version of software, hardware, or firmware described within. The software, hardware, and firmware described in this document are designed, manufactured, and written by CDI. The software and firmware copyright © 2021 CDI with all rights reserved.

The CD52 Bandit is covered under United States Patent No. 6,489,771 B1. The Traxall family of transmitters is covered under United States Patent No. 9172406. Microsoft® and Windows® are U.S. registered trademarks of Microsoft Corporation. Google Earth is a service of Google Inc. Adobe, the Adobe logo, Acrobat, and Reader are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries.

\* All equipment sold by Control Devices, Incorporated (CDI) is warranted for a period of one (1) year from the date of shipment to Purchaser, providing the instrument or equipment has not been modified, abused or used for purposes other than that for which it was designed. Operating equipment while in a damaged condition nullifies this warranty. Batteries, probes, leads, magnets and other consumables subject to wear are not covered by this warranty. CDI will repair or replace faulty equipment during the warranty period when the cause is a defect arising from faulty design, materials or workmanship.

Information in this catalog subject to change without notice.

This document © 2014-2022 CDI. All rights reserved.  
Document Number 89-07-0010-00 Rev 12, July 2022

CDI is a family-owned and operated business located in Broken Arrow, Oklahoma, just 12 miles from downtown Tulsa. Incorporated in 1982, CDI proudly manufactures products in the United States. CDI currently employs a dedicated team with experience in electronics and mechanical design, software and firmware programming, electronics manufacture, machining, and more.

All CDI products are designed and built completely in-house utilizing an on-premises machine shop boasting six fully-automated CNC machines as well as full-time electronics assembly personnel.





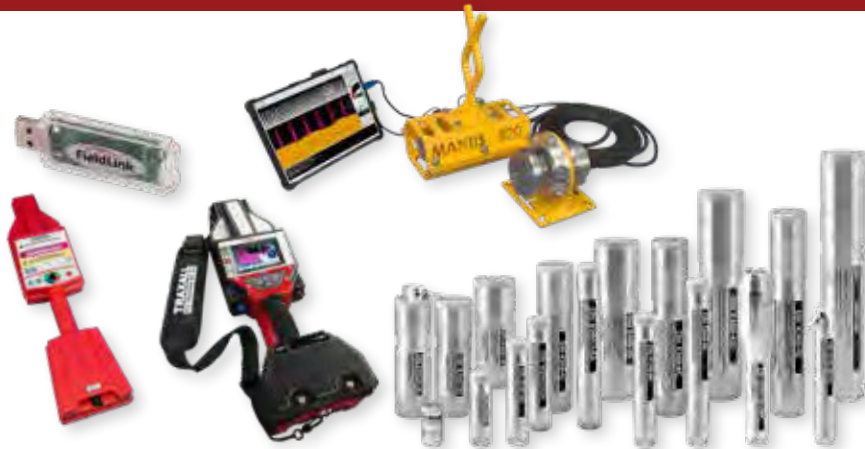
Non-Intrusive Pig Signaling Systems ..... 6

- CD52 Bandit
- CD52-316SS
- Trip Magnets
- A-30/A-45 Subsea Non-Intrusive Passage Detection



TRAXALL Multi-frequency Pig Tracking Systems .....16

- TRAXALL 500/501/620/720/770
- Traxall Accessories
- X100-1N, 2N, 3N, 4N, & 5N Transmitters
- X100-2N-SWX & RC Transmitters
- X200-2AA & 3AA Transmitters
- X300-2C, 3C, 4C, & 5C Transmitters
- X400-2D, 3D, 4D, & 5D Transmitters
- MANTIS 820 ROV Tracking Receiver



22 Hz (Legacy) Pig Tracking and Locating Systems .....23

- CD42-ST5 Subsea Diver/ROV Receiver
- CD42-T1A/T1A-SWX Transmitter
- CD42-T3 Transmitter
- CD42-SWX Module Test Stand



## Acoustic Tracking Systems ..... 25

SoniTrack XLR Geophone



## Above Ground Markers & Satellite Notification Systems ..... 26

CD47-C AGM  
CD47-C Subsea AGM  
AGM Accessories



## InLine Inspection Tool Systems ..... 28

CD42-T0-MPS Transmitter  
CD42-T1-MPS Transmitter  
CD42-T2-MPS Transmitter  
CD49-SC Transmitter  
CD49-LC Transmitter  
CD49-PCB



## GlobalTrack ..... 29

GlobalTrack Browser Based Real Time Pig Tracking Software



## Appendix ..... 30

Transmitter Installation Instructions

# Non-Intrusive Pig Signaling Systems

## CD52 Bandit Magnetic Pig Passage Signaler

For over ten years, the CD52 Bandit has meant simple, reliable, and durable pipeline pig passage detection in the world's most demanding environments. The CD52 Bandit is available with ATEX/IECEX, CSA-UL, and UKCA certification.



Standard Bandit Configuration

Carbon Steel Extensions

Flex Cable

Portable



Rare Earth Trip Magnets for use with CD52-M Series (See page 13)

## CD52-316SS Stainless Steel Non-intrusive Pig Passage Signaler

Harsh environments are a fact of life in the world of energy production! The CD52-316SS is ATEX, IECEx, and UKCA rated and encased in corrosion-resistant 316 stainless steel. These units are ideally suited for harsh offshore and desert environments.

Standard CD52-316SS Configuration



Stainless Steel Extensions



CD52-316SS Flex Cable Configuration



CD52-316SS Portable Configuration



# Non-Intrusive Pig Signaling Systems

## CD52 Bandit Operational Specifications

Detection Type:	Non-Intrusive Passive Magnetic
Applications:	Passage Detection/Recording
Deployment:	Land-based
Sensor:	Noise-Canceling Wire-wound Antenna
Detection Direction:	Bi-Directional
Devices Detected:	Permanent Magnet or Electromagnetic Transmitter (TRAXALL/CD42 Transmitters or CD52 Permanent Trip Magnets recommended)
Detection Speed:	0.01 meter/sec to 20 meter/sec
Passage Visual Indicator:	LCD blinks one hour after passage, holds steady for next 11 hours, Auto-Resets at 12 hours
Passage Electrical Indicator:	Isolated Dry Contact Closure Relays
Pipeline Diameters:	2 in to 60 in [50.8 mm to 1,524 mm]
Pipe Wall Thickness:	1.5 in [38.1 mm] Maximum*
Power Source:	D-Cell (2) Alkaline Batteries
Battery Life:	One Full Year Minimum

## Construction

Housing:	Aluminum (standard) or optional marine-coated 316L Stainless Steel
Window:	Tempered Glass

## Optional Equipment

Sun Shade:	Protection from intense sunlight
Heater System:	Recommended for operation below -22°F [-30°C]
LineStat:	Satellite Radio for transmitting passage time, date, and GPS location via email or text (see pg. 32)
Remote Indicator System (RIS):	Provides visual passage indication up to 328 ft [100 m]

## System Certifications

ATEX ERO21ATEX0004X  
II2G Ex d mb IIB T5 Gb IP66

IECEX IECEX EMT 21.0004X  
Ex d mb IIB T5 Gb IP66

OR

UL-CSA UL-CSA Standard C22.2 No.30  
rated for Class 1  
Division 1

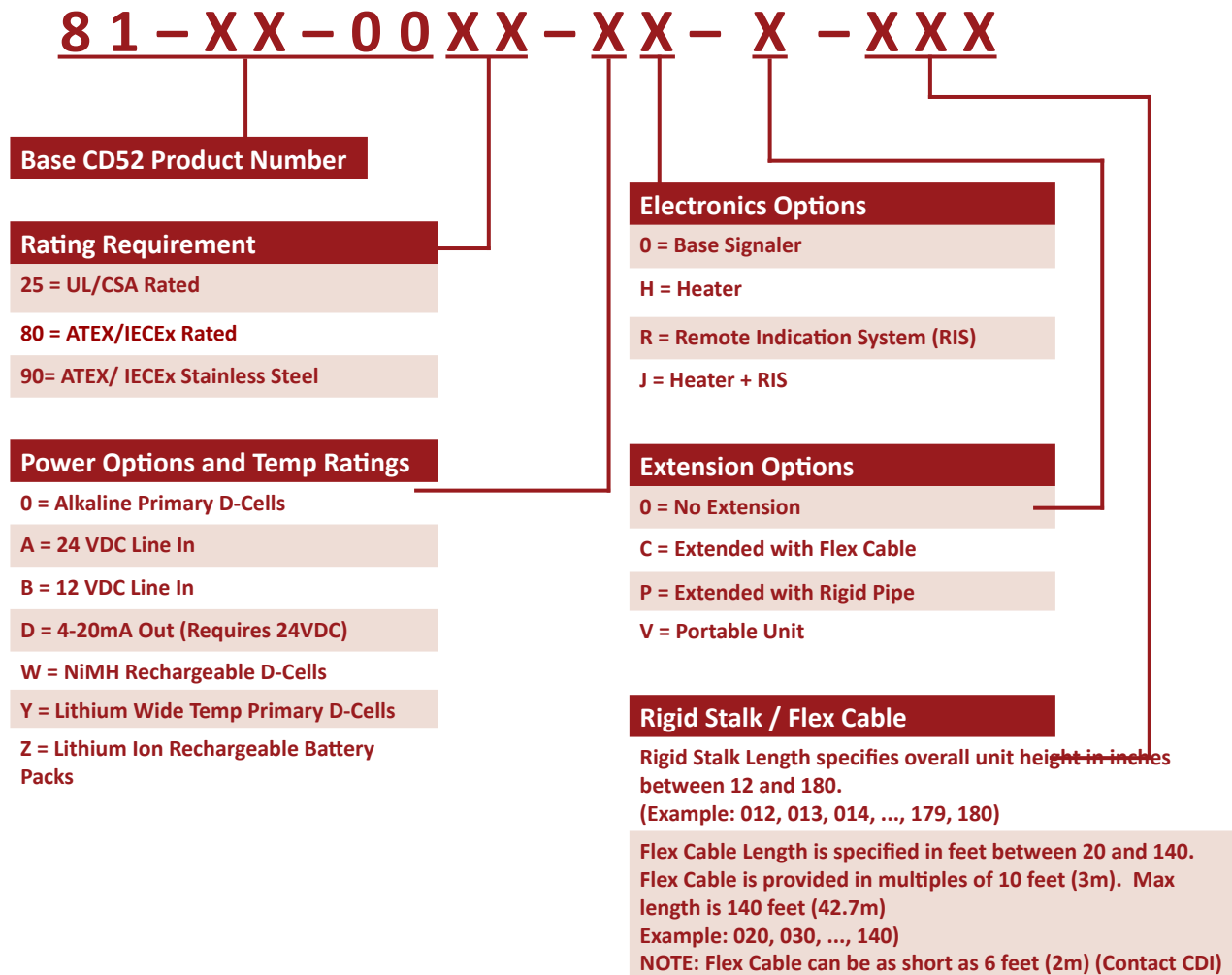
UKCA EMA21UKEX0053X

\* Custom magnet design may be required where pipe wall thickness exceeds 1 in [25.4 mm] or pipe diameter exceeds 48 in [1,219 mm]. Contact CDI for an evaluation of deployment options.



## CD52 Bandit Part Number Builder

Use this matrix to configure the correct Bandit Part Number



# Non-Intrusive Pig Signaling Systems

## CD52 Bandit and 316SS Optional Equipment

Remote Indicator System LEDs  
for high-visibility up to 328 ft [100 m]



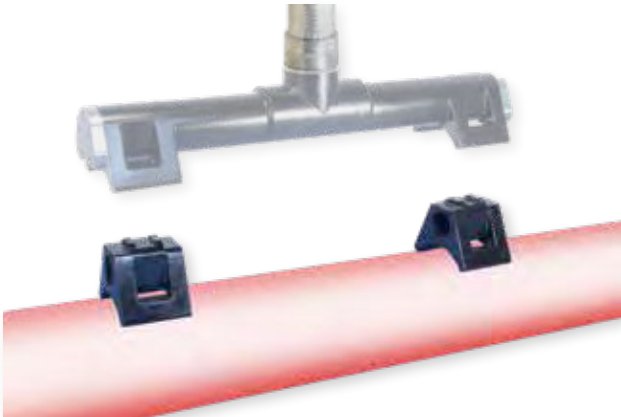
Cathodic Protection Base Mounting -  
insulation matting protects pipeline coating



Stainless steel sunshades for CD52 Bandit and 316 SS protect components by reducing internal temperature



Heat riser insulators for operation where  
pipeline surface > 80°C [176°F]



24 VDC internal heater for  
operation below -22°F [-30°C]



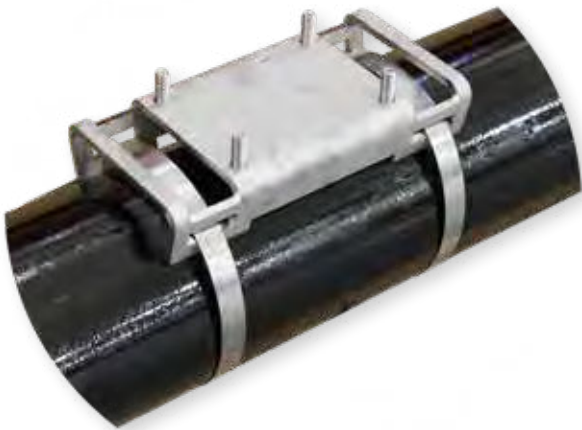
## Installation Tooling and Equipment



Banding tool for securing CD52 Bandit and 316-SS to pipeline



Type 201 Stainless Steel Banding Strap, 100 ft [30.5 m] & Buckle



Type 316 Stainless Steel Banding Strap, 100 ft [30.5 m] & Buckle



Nylon Strap with type 304 Stainless Steel Ratchet for quick installation/removal (Set of two)



# Non-Intrusive Pig Signaling Systems

## CD52 Bandit and 316SS Replacement Components

**CD52 Bandit LCD  
Replacement Module**



**CD52 Bandit User Board  
Replacement Module**



**CD52 Bandit PIC and Analog Filter  
Replacement Module**



**CD52-Remote Indicator System**



**CD52 Bandit Heater  
Replacement Module**  
Includes parts 80-01-0055-00 (Heater  
and 80-01-0069-00 (Thermostat)



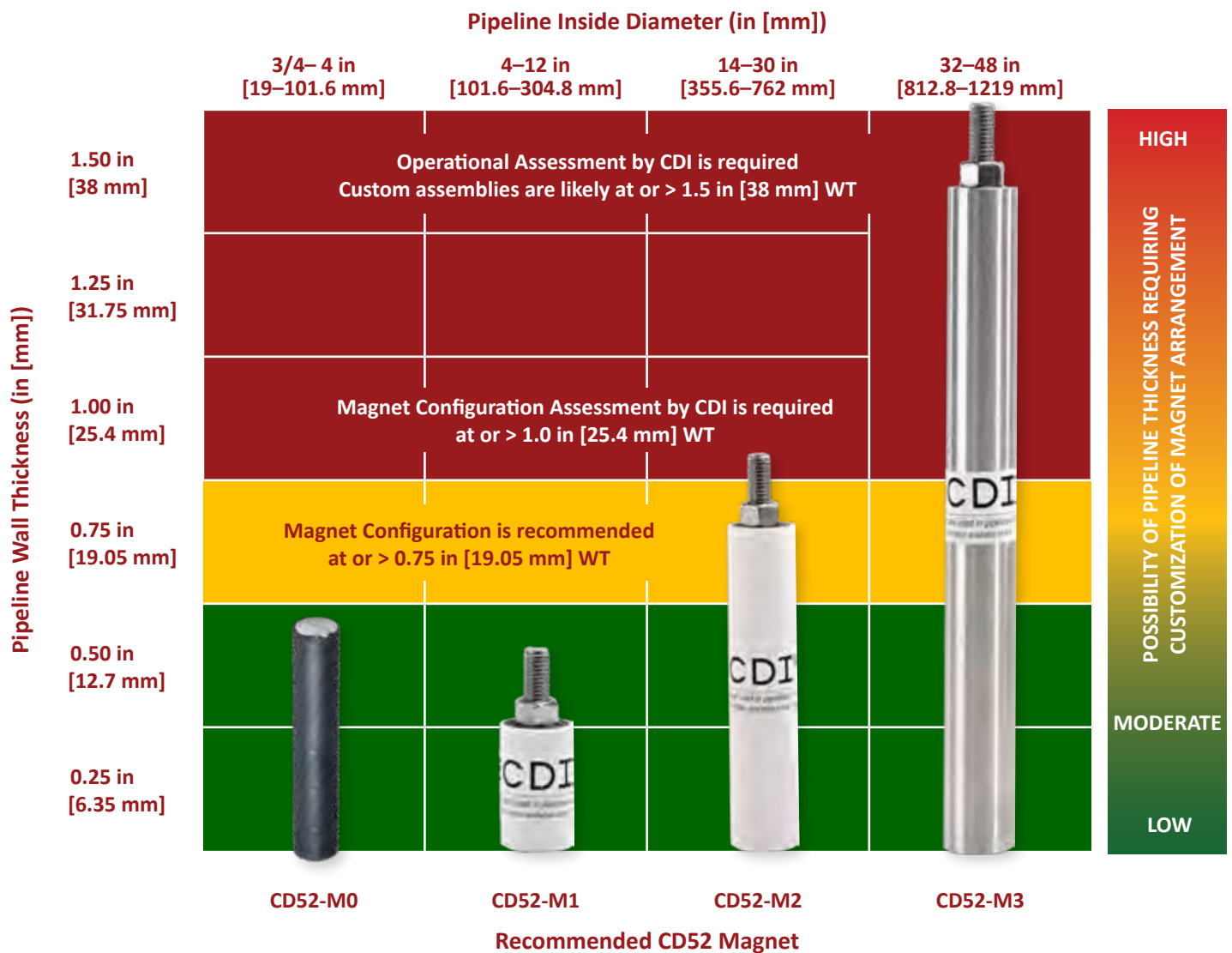
**CD52 Bandit  
Replacement Antenna  
(for rigid stalk units only)**





## CD52-M Series Rare Earth Trip Magnets

CD52-M Series are the most powerful rare earth trip magnets available in the industry. They may be attached to or placed inside almost any type of pipeline pig and are detectable at any speed by our CD52 signaling system.



Magnet Type: Neodymium (NdFeB)  
Max Operating Temp: 200° C [392°F]

Threaded Stud (M1-M2-M3):  
1/2-13 UNC x 1.375 in [35 mm]  
4.665 in [118 mm] also available

# Non-Intrusive Pig Signaling Systems

## CD52-A30/A45 Subsea Pig Signalers

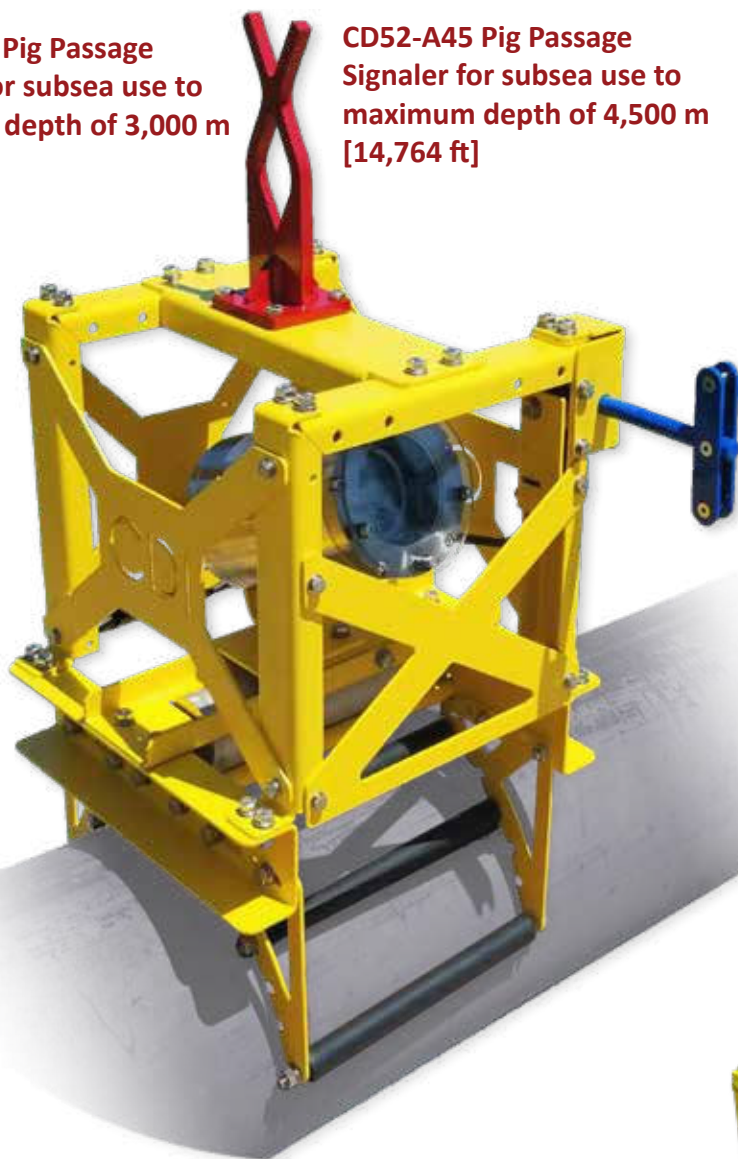
Pipeline pigs are a routine part of modern pipeline operations. Keeping track of those pigs in a subsea pipeline network has become an ever-increasing part of what the pipeline integrity specialist must do. If you're running pigs below the waves, you need the CD52-A30/A45 for tracking and signaling.

CD52-A30 Pig Passage Signaler for subsea use to maximum depth of 3,000 m [9,842 ft]

CD52-A45 Pig Passage Signaler for subsea use to maximum depth of 4,500 m [14,764 ft]



Chrome Duplex Stainless Steel Housing constructed of 22/25% chrome duplex for higher strength and corrosion resistance



Fishtail Handle for ROV



Nylon Ratchet Straps

## CD52-A30/A45 Operational Specifications

Detection Type:	Non-Intrusive Passive Magnetic
Applications:	Passage Detection/Recording
Deployment:	Subsea (ROV or Diver)
Sensor:	Noise-Canceling Wire-wound Antenna
Detection Direction:	Bi-Directional
Devices Detected:	Permanent Magnet or Electromagnetic Transmitter (CD42 Transmitters or CD52 Permanent Magnets recommended)
Detection Speed:	0.01 meter/sec to 20 meter/sec
Passage Visual Indicator:	LCD blinks one hour after passage, steady for next 11 hours, auto-resets at 12 hours Four high-visibility flashing red LED in an array that flashes pig count up to 100 pigs with flash duration of 48-hours Optional Xenon flasher: 48-hour duration
Passage Electrical Indicator:	Isolated Dry Contact Closure Relays
Pipeline Diameters (Standard):	2 to 16 in (50.8 mm to 1524 mm)**
Pipe Wall Thickness:	Up to 1.5 in [38 mm]*
Power Source:	D-Cell (2) Alkaline Batteries
Battery Life:	One year (365 days) Alkaline
Controls:	User Interface T-Handle (to clear passages/set clock)
Dimensions (No saddle/fishtail)	16 in x 21 in x 16 in [0.4 m x 0.5 m x 0.8 m]
Dimensions (with pipe saddle)	16 in x 21 in x 23 in [0.4 m x 0.5 m x 0.6 m]
Fishtail Handle Height	9 in [0.2 m]
Design Life:	20 Years

## Construction

Housing:	Duplex housing, Titanium faceplate, 316 Stainless Steel frame, Quartz window
----------	--

## CD52-A30/A45 Performance

	CD52-A30	CD52-A45
Water Depth (maximum):	9,842 ft [3,000 m]	14,764 ft [4,500 m]
Operating Pressure (maximum):	4,388 psi [303 bar]	6,575 psi [453 bar]

\* Custom magnet design may be required where pipe wall thickness exceeds 1 in [25.4 mm] or pipe diameter exceeds 48 in [1,219 mm]. Contact CDI for an evaluation of deployment options.

\*\*Custom pipe saddles to accommodate larger pipelines available. Contact CDI for options.

# Multi-frequency Pig Tracking and Locating Systems

## TRAXALL 500/501/620/720/770 Multi-frequency Receivers

TRAXALL handheld receivers detect and record pig passages three different ways: by using industry-standard 22 Hz transmitters (manufactured by CDI or others), by using one of CDI's color-coded and frequency-adjustable transmitters, or by detecting MFL magnetizers without the use of a transmitter.










# Multi-frequency Pig Tracking and Locating Systems

## TRAXALL Receiver Comparison

Use this matrix to select the best TRAXALL receiver for your application

FEATURE	TRAXALL 500	TRAXALL 501	TRAXALL 620	TRAXALL 720	TRAXALL 770
					
Tracks any 22 Hz Legacy Transmitter	●	●	●	●	●
Tracks CDI TRAXALL Frequencies Beyond 22 Hz			●	●	●
Max Transmitter Frequencies Supported	1	1	3	3 + MFL	8 + MFL
Tracks/Locates MFL Magnetizers Without a Transmitter				●	●
Graphical User Interface				●	●
Remote Antenna Option Available		●	●		
Remote Passage Flasher Option Available		●	●	●	●
Remote Viewing via Bluetooth & PC Software				●	●
Remote Control via Bluetooth & PC Software				●	●
Pig Passage GPS Position & Data/Image Recording				●	●
Track back to Previous Locations via GPS				●	●
Google Earth™ GPS Integration				●	●
LineStat Satellite Passage Notification Option Available		●	●	●	●
Ships in Pelican™ Carry/Shipment Case	●	●	●	●	●
Cold-Weather Operational to -40° Celsius Option Available	●	●	●		
Durable and Weatherproof	●	●	●	●	●

# Multi-frequency Pig Tracking and Locating Systems

## TRAXALL Operational Specifications

	500/501/620	720/770
Detection Type:	Non-Intrusive Passive Magnetic	Non-Intrusive Passive Magnetic
Applications:	Passage Detection, Tracking, and Locating	Passage Detection/Recording, Tracking, and Locating
Deployment:	Land-based	Land-based
Sensor:	Noise-Canceling Wire-wound Antenna	Noise-Canceling Wire-wound Antenna
Detection Direction:	Bi-Directional	Bi-Directional
Passage Visual Indicator:	LED	LCD w/three viewing modes
Passage Electrical Indicator:	Isolated Dry Contact Closure Relay	Isolated Dry Contact Closure Relays
Power Source:	AA-Cell (6) Alkaline Batteries	D-Cell (6) Alkaline Batteries
Operational Temperature Range:	−40°F to +185°F [−40°C to +85°C]	−4°F to +140°F [−20°C — +60°C]
Controls:	Power ON/OFF, Speaker Mute, LED Brightness, Gain Sensitivity	Power ON/OFF, Automatic Light Sensor, Keypad, Gain Sensitivity
Dimensions:	23 in x 5-1/4 in [584 mm x 133 mm]	23-1/2 in x 7 in [597 mm x 178 mm]
<b>Construction</b>		
Chassis:	Water-resistant durable plastic	Water-resistant durable plastic and powder-coated aluminum

## Bulkhead-to-Client Device Cable

(TRAXALL 501, 620, 720, & 770)



Special 8 ft [2.4 m] cable to connect a user-provided device to the TRAXALL 770/720 Programmable Relay Port. Typical devices include lights, horns, and other audio/visual equipment used where an unmanned passage annunciation must be monitored.



# Multi-frequency Pig Tracking and Locating Systems

## TRAXALL Remote Control

(TRAXALL 770 & 720)

Use your laptop or PC to monitor and operate your TRAXALL 770/720 from a remote location (for example, a vehicle cab or shelter during inclement weather) with *TRAXALL Remote Control*, an application available as a no-cost download for all TRAXALL 770/720 users.



## Remote Antenna (TRAXALL 501, & 620)

External antenna with 20 ft [6 m] cable for tracking, locating, or pinpointing over submerged or limited-access pipeline.



## Remote Passage Flasher (TRAXALL 501, 620, 720, & 770)

The Remote Flasher is useful for at-a-glance passage confirmation where an unmanned passage must be monitored.

When the 15 ft [4.5 m] cable is attached, the flasher is automatically activated when a transmitter is detected.

# Multi-frequency Pig Tracking and Locating Systems

## Programmable Multi-frequency TRAXALL Transmitters

CDI X-Series Transmitters are TRAXALL-compatible electromagnetic pipeline pig-tracking devices offering both programmable frequency and power control through CDI's proprietary FieldLink wireless communications system.

Models where noted are available with ATEX-IECEx certification or titanium construction for extreme high-pressure (7500 psi/517 bar) pipeline environments.



### N - CELL

also available:



### AA - CELL

also available:



X100-1N



X100-2N



X100-3N



X100-4N



X100-5N



for pipeline diameters:

2 – 8 in  
[50.8 – 203 mm]

3 – 10 in  
[76 – 203.2 mm]

4 – 12 in  
[101 – 305 mm]

6 – 12 in  
[152 – 305 mm]

6 – 14 in  
[152 – 356 mm]

for pipeline diameters:

6 – 24 in  
[152 – 610 mm]

8 – 28 in  
[203 – 711 mm]



### C - CELL

also available:



### D - CELL

also available:



X300-2C



X300-3C



X300-4C



X300-5C



for pipeline diameters:

6 – 24 in  
[152 – 610 mm]

8 – 28 in  
[203 – 711 mm]

12 in [305 mm]  
and larger

14 in [356 mm]  
and larger

X400-2D



X400-3D



X400-4D



X400-5D



for pipeline diameters:

12 – 28 in  
[305 – 711 mm]

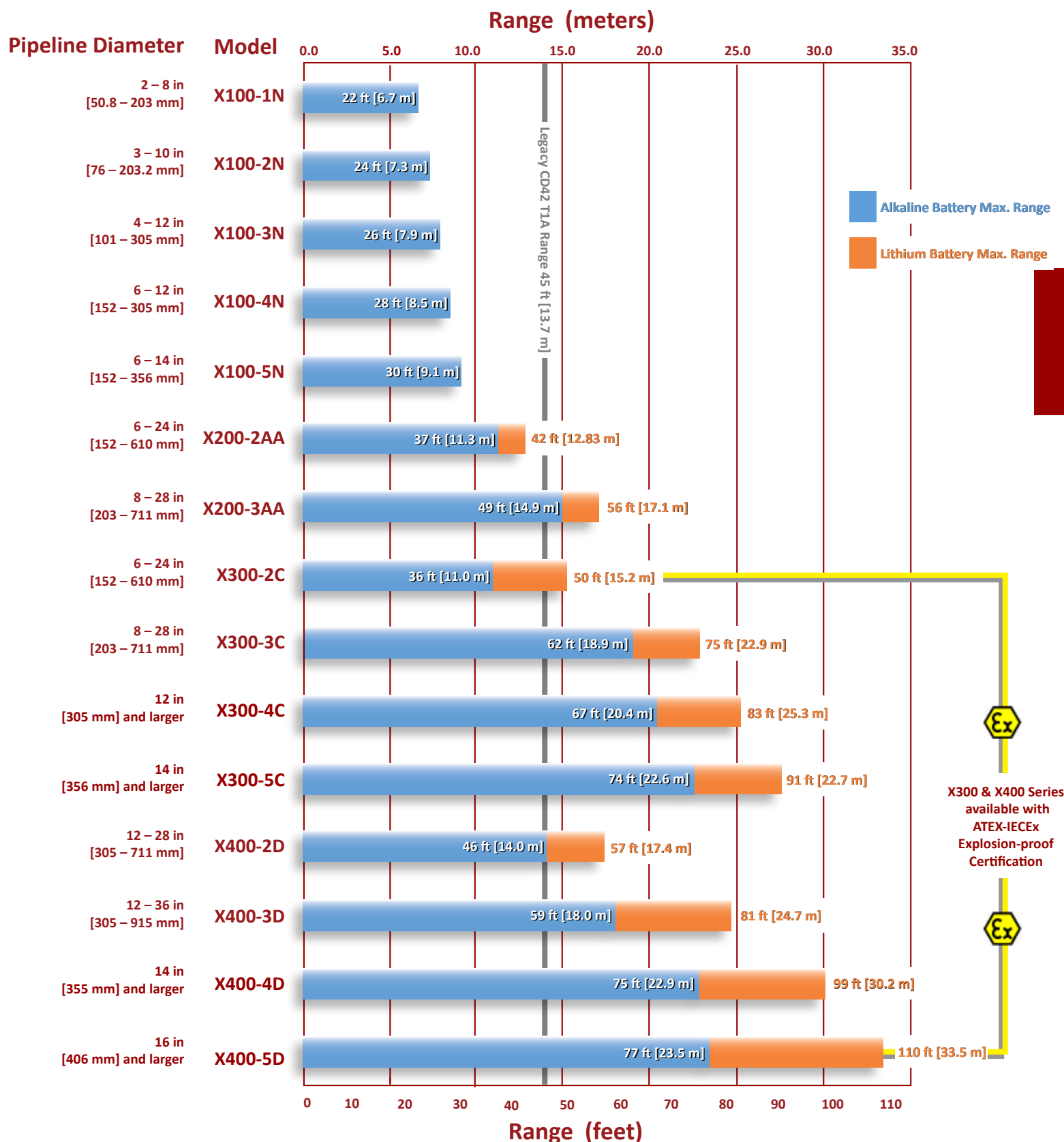
12 – 36 in  
[305 – 915 mm]

14 in [355 mm]  
and larger

16 in [406 mm]  
and larger



# Multi-frequency Pig Tracking and Locating Systems



# Multi-frequency Pig Tracking and Locating Systems

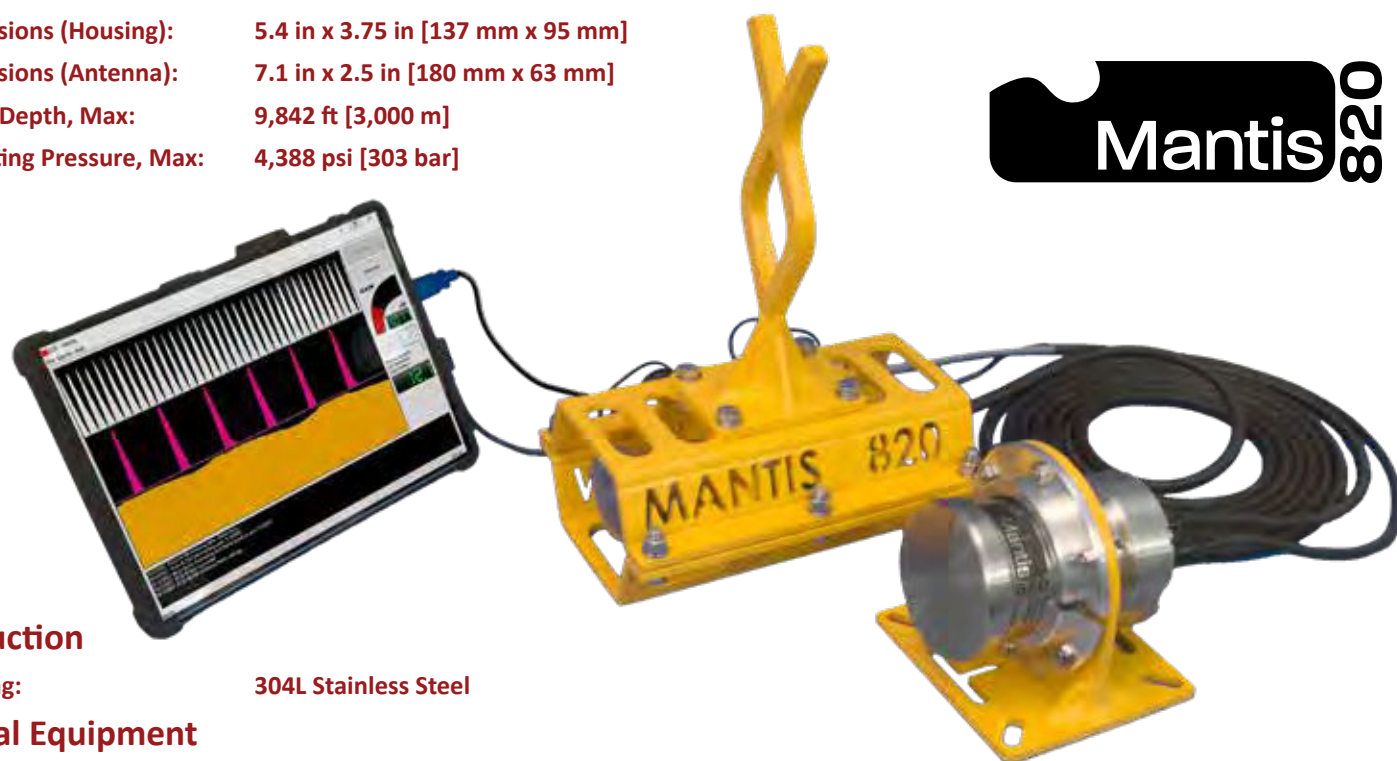
## MANTIS 820 ROV Tracking Receiver

The MANTIS 820 is CDI's newest product for subsea pipeline pig tracking. The MANTIS is a deep-water ROV tie-in solution which provides all of the benefits of CDI's multi-frequency electromagnetic pig tracking in a durable and robust package. The MANTIS 820 may be purchased or rented to use along with our wide family of TRAXALL Transmitters which include eight ATEX variants.

### Operational Specifications

Detection Type:	Non-Intrusive Electromagnetic
Applications:	Tracking, Locating, and Pinpointing
Deployment:	Mounted to subsea ROV Antenna held in manipulator arm (typical)
Devices Detected:	Electromagnetic Transmitters (22 Hz + 2 additional TRAXALL transmitter frequencies)
Power Input:	6 VDC to 48 VDC
Power Source:	ROV
Output:	RS-232 Bi-directional Serial Data Stream
Dimensions (Housing):	5.4 in x 3.75 in [137 mm x 95 mm]
Dimensions (Antenna):	7.1 in x 2.5 in [180 mm x 63 mm]
Water Depth, Max:	9,842 ft [3,000 m]
Operating Pressure, Max:	4,388 psi [303 bar]

**Mantis** 820



### Construction

Housing:	304L Stainless Steel
----------	----------------------

### Optional Equipment

User Interface System:	Microsoft® Surface Tablet configured with MANTIS application software
------------------------	---

# 22 Hz (Legacy) Pig Tracking and Locating Systems

## CD42-STS Subsea Diver/ROV Pig Tracking System

Designed for a subsea environment, the CD42-STS tracks moving pigs and locates stationary pigs equipped with CDI's standard line of electromagnetic transmitters. The CD42-STS may be implemented to a maximum depth of 8,000 ft (2,438 m) and is designed to be carried by either a diver or ROV.



## CD42-STS Operational Specifications

Detection Type:	Non-Intrusive Electromagnetic
Applications:	Tracking and/or Locating via Diver or ROV
Deployment:	Subsea (ROV or Diver)
Sensor:	Wire-wound Antenna
Detection Direction:	Bi-Directional
Devices Detected:	Electromagnetic Transmitters (Standard CD42 Family)
Detection Speed:	0.01 meter/sec to 20 meter/sec
Visual Indicator:	16 Super-bright LED array indicates transmitter signal strength
Power Source:	D-Cell (6) Alkaline Batteries
Battery Life:	60 hours (2.5 days)
Controls:	Gain Adjustment via Non-penetrating Pushbutton
Dimensions:	36.5 in [927.1 mm] length x 6 in [152.4 mm] diameter
Operational Temperature Range:	-4°F to +140°F [-20°C — +60°C]
Water Depth, Maximum:	8,000 ft [2,438.4 m]
Operating Pressure, Maximum:	3,560 psi [245 bar]

## Construction

Housing:	316 Stainless Steel
----------	---------------------

## Optional Equipment

CD42-STS Fishtail ROV Handles

C42-CPA Close Proximity Antenna



# 22 Hz (Legacy) Pig Tracking and Locating Systems

## CD42 22 Hz Legacy Series Transmitters

CDI offers the largest family of pipeline pig location and tracking transmitters in the industry! Manufactured in-house to exacting tolerances, our T-Series transmitters operate at the industry-standard 22 Hz frequency and are safe and reliable for use in any onshore or offshore environment and in any pipeline product, e.g., water, oil, gas, ammonia, carbon dioxide, and more.

CDI transmitters are available in a wide variety of transmission ranges and sizes to fit every application. Flange kits are also included with most models, and many can be configured with a pressure switch module.



### CD42-T1A

Pipeline Dia:	8 – 28 in [203 – 711.2 mm]
Pressure, max :	2,500 psi [172 bar]
Dimensions:	10.19 in x 2.0 in [258.8 x 50.8 mm]
Batteries:	AA-Cell (6) Alkaline
Battery Life:	Standard pulse: 500 hrs Skip-one pulse: 678 hrs
Material:	304 Stainless Steel
Range, open air:	45 ft [13.7 m] Alkaline 65 ft [19.8 m] Lithium
Operating Temp Range:	– 40°F to 140°F [– 40°C to 60°C]



### CD42-T1A-SWX

For Transmitter:	CD42-T1A
Pressure Range:	15–1,100 psi [1–76 bar]
Max Transmitter Pressure:	2,500 psi [172 bar]



Left to Right: CD42-T4, CD42-T3, CD42-T0, CD42-T4HP, CD42-T1AVHP

## CD42-SWX Pressure Switch Module Test Stand



Test activation of your pressure switches in your laboratory or in the field before pipeline deployment. An analog (shown here) or optional digital pressure gauge provides continuous read-out of closed-system pressure.

When activation pressure is attained, transmission is confirmed by a tracking receiver such as the TRAXALL.



## SoniTrack XLR Geophone Tracking System with Integrated FM Transmitter

The waterproof SoniTrack XLR geophone-based pipeline pig tracking system can be used to track any pig by amplifying the sounds they make as they pass through the pipes. To hear pigs, simply plug the geophone into the soil and listen for pigs via the supplied headphones. You can also listen wirelessly through your vehicle's audio system by using the built-in FM transmitter.

Simply press the AutoTune search button and SoniTrack XLR will automatically find the quietest unused FM band and begin transmitting audio. Tune your radio to the same FM frequency and any number of people can hear the pig's approach, no headphones required.

### SoniTrack XLR

Principle of Operation	Geophone Acoustic Amplifier
Type of Pigs Detected	Any
Package	Waterproof ABS plastic with membrane keypad
Outputs	Headphones Out FM Transmission to FM radio receivers Auxiliary Audio Out
Inputs	Geophone Probe Input 25' Cable 12 Volt Vehicle Power Port Input (can be used in lieu of batteries)*
Batteries	4 AA- Cell Alkaline
Battery Life	40 hours minimum
Operational Temperature Range	-40°C to +85°C
Radio Transmission Range	200 ft
Detection Range	2 miles**



\* Custom cable lengths available

\*\* Varies due to pipeline conditions and type of pig



# Above Ground Marker (AGM) Systems

## CD47-C Time-based Benchmark

The CD47-C Time-based benchmarker records the GPS time of a passing intelligent inspection tool. This precision time, coupled with the physical pipeline location, correlate data recorded by the inspection tool. The result: major increased accuracy of smart pig feature location callouts.

An onboard Global Positioning System (GPS) provides a synchronized tool passage time accuracy guaranteed to be within 250 milliseconds over system battery life.

The CD47-C is the third generation time-based benchmarker created by CDI in response to customer demands for accurate, reliable, and robust equipment that can be transported anywhere in the world and work out of the box in extreme heat and cold conditions. The new CD47-C is smaller, lighter, and easier to use than ever before!

## CD47-C Operational Specifications

Detection Type:	Non-Intrusive Passive Magnetic
Applications:	Benchmarking/Passage Detection/Recording
Deployment:	Land-based Shallow Water w/Tethered Remote Antenna Subsea w/Subsea Housing
Subsea Deployment Depth:	492 ft [150 m] w/Subsea Housing
Detection Direction:	Bi-Directional
Devices Detected:	MFL and Transmitters
Detection Depth:	16.5 ft (5 m)
Passage Visual Indicator:	16 Bright Red LED, Multi-lingual LCD
Storage Media:	2 MB Non-volatile Flash memory
Number of Recordings:	> 1,000
Power Source:	D-Cell (2) Alkaline Batteries
Battery Life:	7 Days (45 days with optional Long Life Battery Pack)

## Construction

CD47-C Unit:	ABS plastic with urethane protective bumpers
Subsea Housing:	Powder-coated Stainless Steel



## CD47-C Time-based Benchmarker Accessories

**Tethered Remote Antenna w/25 ft [7.6 m] cable  
for shallow water environment**



**CD47-C Communication Cable**

**CD47-C Utility Flash Drive\***



## Also Available:



**Replacement  
Bluetooth  
Module**



**D-Cell Alkaline  
Batteries  
(Set of Two)**



**Long-life Battery Pack for sustained (45-day)  
Subsea Use. Requires Shallow Water Housing**

\*Utility Flash Drive contains CD47-C User Guides, *Marker Data Download & Analysis* application, firmware, and support files.

## InLine Inspection Tool Transmitter Family

CDI InLine Inspection Tool Transmitters are high-quality location and tracking devices specifically designed for magnetic flux leakage (MFL), ultrasonic, caliper tools, and other ILI vehicles.

### ILI Tool Transmitters with Integrated Driver Circuit



#### X400 MPS

Pipeline Dia: 14 in [355 mm] and larger

Dimensions: 6.7 x 2.5 in [170.2 – 63.5 mm]

Weight: 2.5 lb (x kg)

Range, open air:\* 47-58 ft [14.3-17.6 m]

Operating Temperature Range: 40°F to 140°F [-40°C to 60°C]

### ILI Tool Transmitters with Integrated Driver Circuit

#### CD42-T0-MPS

Pipeline Dia: 12 in [305 mm] and smaller

Dimensions: 4.750 in x 1.500 in [120.7 x 38.1 mm]

Weight: 2 lb [0.91 kg]

Range, open air:\* 40–57 ft [12–17.3 m]

Operating Temperature Range: – 40°F to 140°F [– 40°C to 60°C]



#### CD42-T1-MPS

Pipeline Dia: 12 – 28 in [304.8 – 711.2 mm]

Dimensions: 6.75 in x 2.0 in [263.53 x 76.2 mm]

Weight: 2.5 lb [1.1 kg]

Range, open air:\* 46–71 ft [14–21.6 m]

Operating Temperature Range: – 40°F to 140°F [– 40°C to 60°C]



### ILI Tool Transmitters for use with Remote Driver Circuit

#### CD49-SC

Pipeline Dia: 24 in [609.6 mm] and smaller

Dimensions: 4.724 in x 1.5 in [120 x 38 mm]

Weight: 2 lb [0.91 kg]

Range, open air:\*\* 40–85 ft [12–26 m]

Operating Temperature Range: – 40°F to 140°F [– 40°C to 60°C]



#### CD49-LC

Pipeline Dia: 26 in [660.4 mm] and larger

Dimensions: 6.811 in x 3.012 in [173 x 76.5 mm]

Weight: 2 lb [0.91 kg] 6.8 lb [3.07 kg]

Range, open air:\*\* 70–135 ft [21.3–41 m]

Operating Temperature Range: – 40°F to 140°F [– 40°C to 60°C]



#### CD49-PCB

##### Remote Driver Circuit for CD49 Transmitters

Placement:	Anywhere within an ultrasonic, magnetic flux leakage (MFL), caliper, or other tool
Input:	0–5 VDC Logic 0–36 VDC Power
Modes:	ON/OFF Pulse/Continuous



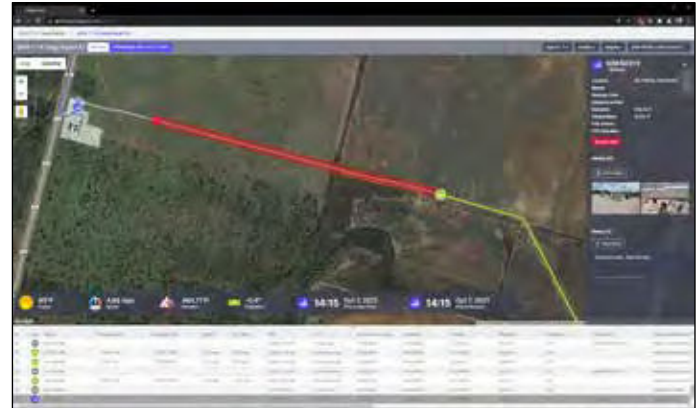
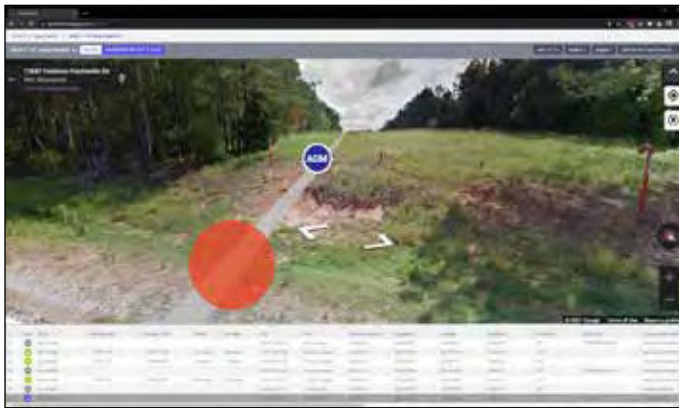
\* Range based upon a 9–24 volt power supply \*\* Range based upon a 5–36 volt power supply



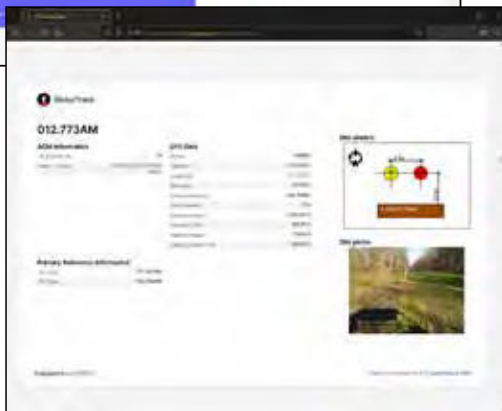


## Browser Based Real Time Pig Tracking Software

GlobalTrack generates reports and displays your pig's location live. Watch your pigs as they travel on the map automatically recording passage times or take control and enter them manually. Easy to use spreadsheets and customizable reports provide you with a current picture of the run and keep everyone on the same page. Give your clients the current data they need with GobaTrack.



View pigs as they travel across the map



Free with CDI hardware

- Up to date views on all of your runs
- Automated emails for stakeholders
- Integrated weather alerts for your team on the ground
- Custom branded data reporting
- Multiple subscription tiers, or free with CDI hardware

Learn more at [www.globaltrack.info](http://www.globaltrack.info)

## Transmitter Installation Instructions

### Foam and Plastic Pigs

- Remove plug or bolt
- Place transmitter in cavity (either direction)
- Replace plug/bolt



### Metal-bodied Pigs

Use the included flange kit\* to mount a transmitter outside the casing of a metal pig.

- Install the flange kit with Allen wrench and screws as shown.
- Attach the transmitter to the customer supplied plate. Mount plate securely to the pig with transmission coil facing outward.



## Checklist

Before placing a transmitter into service, always make sure:

- Batteries are fresh and of proper size and type.
- Battery direction is properly observed.
- Serviceable O-rings are installed. Brittle and/or deformed O-rings may not properly seal, thus compromising case integrity.
- Transmitter case, caps, and cap threads are clean and free of dents, ruptures, or other damage which could compromise the transmitter components.

\* Included with most CDI transmitters

This page intentionally left blank

**CDI**

**1801 North Juniper Avenue  
Broken Arrow, OK 74012 USA**

**+1 (918) 258-6068 Worldwide**

**+1 (918) 251-9851 Fax**

**Sales and rental enquiries: [sales@pigging.com](mailto:sales@pigging.com)**

**Technical enquiries: [support@pigging.com](mailto:support@pigging.com)**

**Your Local CDI Distributor Is:**