

# CD52-A30 Subsea Pig Signaler

## Non-Intrusive

The CD52 family of products allow for easy, clamp-on, non-intrusive pig passage detection to depths of 3000 meters (9850 ft) for the CD52-A30 or 4500 meters (14750 ft) for the CD52-A45. Non-intrusive means fewer problems with maintenance and corrosion and no possibilities of leaks. Simple isolation pads may be placed between the detector and the pipe to ensure zero possibility of galvanic corrosion.

## Field Proven

CDI has been manufacturing the patented CD52 family of pig signaler for almost 10 years. With thousands of systems installed around the globe, the CD52 family has a reliable performance record in burning deserts, frozen tundras and everything in between. Many of CDI's customers and large oil and gas producers who rely upon the CD52 family of equipment to set valves, control pump stations and interface to SCADA systems.

## Battery Powered

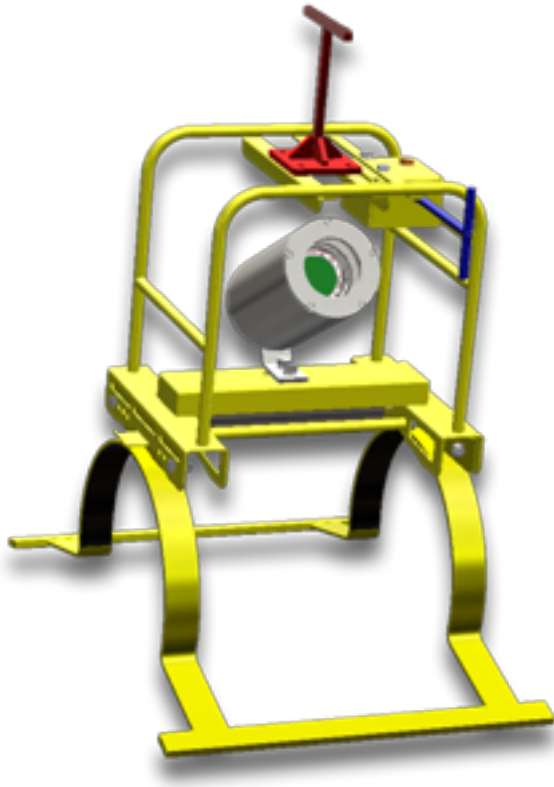
The CD52-A30 and CD52-A45 are fully battery powered and require no existing infrastructure. Two common D-Cell lithium batteries provide a full five (5) years of life. Changing batteries is as simple as unscrewing the face of the unit, removing the old batteries and inserting two new ones.

## Sensing Means

The sensing means of the CD52-A30 and CD52-A45 is a set of patented, non-intrusive proprietary noise cancelling antennas. This clever antenna scheme was invented by CDI specifically for use in pig passage detection and is available in all CD52 family products. Using this antenna system gives the CD52-A30 its ability to reject nearby magnetic noise and halt costly false positive triggering. Simply placing a small, safe, permanent magnet onto the pig is all it takes to start using the CD52-A30 or CD52-A45 system.

## Topside Signaling

A battery powered acoustic pinger allows remote signaling of a pig passage to any surface going vessel. Simply lower the receiving acoustic transducer over the side of the vessel and listen for the 1 second pings. By default the CD52-A30 and CD52-A45 pig signalers ping to indicate a pig passage for a period of 36 hours.



## Portable

The CD52-A30/A45 system is small and lightweight enough at 35 lbs (16kg) to be deployed by divers, while at the same time being robust and durable enough to survive the rigors of deep-sea deployment using ROVs. The CD52-A30 and CD52-A45 may be optionally purchased with a protective cage shown above. But regardless of the configuration chosen, the systems can be on site and ready for work within days.

## Easy Subsea Installation

Deep water installation with an ROV is quick and easy with CDI's Quick-Clip deployment design. The CD52-A30 and CD52-A45 simply snap onto the pipeline.

### Subsea Pig Detector Operational Specifications

<b>Principle of Operation:</b>	Non-Intrusive, Passive Magnetic Detection
<b>Type of Pig Detected:</b>	Any
<b>Detection Direction:</b>	Fully Bi-Directional
<b>Minimum Pig Speed:</b>	0.01 - 20 meters/second
<b>Method of Installation:</b>	Diver or ROV affixed to pipeline, non-intrusive
<b>Sensor Type:</b>	Patented, Noise-Cancelling Wire-Wound Antenna
<b>Interface Options:</b>	Dry Contact Closure, Programmable Duration Visual Indicators
<b>Passage Indications</b>	LCD Flash One Hr, Solid for 12 Hrs, Auto Reset

<b>(Visual):</b>	LED Flash, 36 Hrs Default * Xenon Flasher Optional, 36 Hrs Default *
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### Power Specifications, CD52-A30 Detector

<b>Power Source:</b>	Two (2) Lithium D-Cells Suitable for Low Temperature Operation
<b>Battery Life (Detector):</b>	5 years (1,825 days)

### Power Specifications, Acoustic Pinger Option

<b>Power Source:</b>	Lithium Battery Pack
<b>Pulse Rate:</b>	One 10ms Ping Each Second
<b>Battery Life:</b>	> 30 Days **

### Power Specifications, Xenon Flasher Option

<b>Power Source:</b>	Lithium Battery Pack
<b>Flash Rate:</b>	One Flash Per Second
<b>Battery Life:</b>	> 30 Days **

### Permanent Magnets for Pipeline Pigs

CD52-M0	3/4" - 4" Pipelines
CD52-M1	4" - 12" Pipelines
CD52-M2	14" - 30" Pipelines
CD52-M3	32" - 48" Pipelines

### System Detail Specifications

	<b>CD52-A30</b>	<b>CD52-A45</b>
<b>Water Depth:</b>	3,000 meters	4,500 meters
<b>Maximum Operating Pressure:</b>	303 bar / 4,388 psi	453 bar / 6,575 psi
<b>Housing Material:</b>	Duplex Stainless Steel	Duplex Stainless Steel
<b>Overall Dimensions:</b>	16" x 10" x 18" [0.4m x 0.25m x 0.45m]	16" x 10" x 18" [0.4m x 0.25m x 0.45m]
<b>Design Life:</b>	20 Years	20 Years

\* User Programmable Duration  
 \*\* Minimum 30 days of ping/flash time available. Overall battery life is dependent upon requested duration of ping/flash after each pig passage.