

# EXCAVATOR SENSORS

**NO CONTACT OR BOUNCING EFFECT**



The CAP ENCODER is designed to meet the requirements of harsh environment work. We combined a non-contact sensor, rugged enclosure, and wet mateable connectors and cabling along with 20+ years of marine construction experience to provide a sensor that will withstand the environment and accuracy specs of any project.

- **Non-contact-** works in water, oil, and grease. Resistant to shock and vibration.
- **High accuracy-** 18bits, 262,144counts per rev, 4.94 arc-secs, 24 micro-rads, .0014 degrees
- **Wet mateable connectors-** Teledyne Impulse or equivalent
- **Rugged Housing-** salt or fresh water
- **USA sold and supported-** reduced lead times and costs. Cable Arm support.

#### Electrical

**Data Outputs-** RS422, SSI1-8, ASI, or SPI

**Power supply-** 12 or 24 VDC

**Current Consumption-** <100mA, <75mA typical

**Reverse Polarity-** Yes. To max voltage

#### Applications:

- Excavator arms
- Machine or bucket rotation
- Outdoor winches
- Swing arm rotation
- Custom applications

#### Measurement Performance

**Measurement-** Absolute over 360 degrees

**Resolution-** 18bits, 262,144counts per rev, 4.94 arc-secs, 24 micro-rads, .0014 degrees

**Repeatability-** +/- 1 count

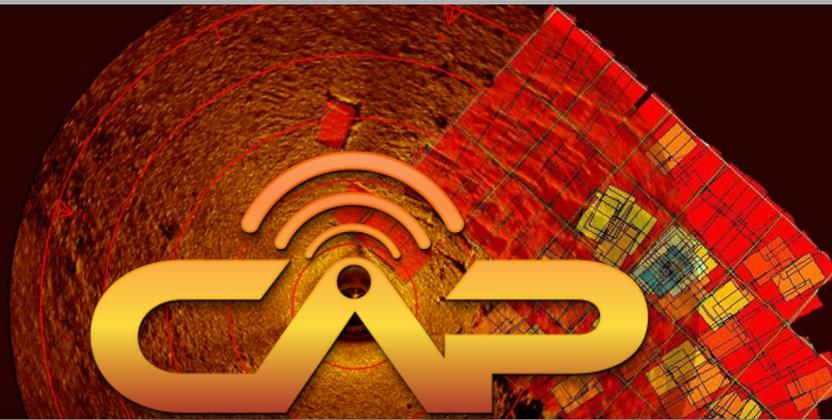
**Internal Update Rate-** <.1 Millisecond

**Max Speed for Angle Measurement-** 9,000 RPM

**Max Physical Speed-** 10,000 RPM



Cable Arm Positioning 3452 West Jefferson Ave. Trenton, Michigan 48183  
Phone: 734.676.6108 Email: [info@cablearm.com](mailto:info@cablearm.com) Web: [www.cablearm.com](http://www.cablearm.com)



## CABLE ARM POSITIONING

CLAMVISION® SOFTWARE IS A FULLY WIRELESS INTEGRATED DREDGE POSITIONING SYSTEM

# CLAMVISION®

ClamVision® by Cable Arm, Inc. offers a wireless dredge positioning system designed to fulfill the need of most any dredging application. With a versatile software suite and an “off the shelf” hardware package, ClamVision® fits nearly every type of dredge and is easy to install and maintain. From clamshells to cutter heads, excavators to drill barges, ClamVision® gives operators and crew a real-time view of barge and machine position over project. ClamVision® tells the operator where to dig and how deep to go, eliminating all guesswork! It displays a 3-D, color-coded surface derived from existing hydrographic data and projected surface models. And, as always, ALL system information is recorded and stored to a file which can be viewed using any pc, with no need for extra “hard lock” keys. ClamVision® by Cable Arm, Inc. features the best service and support in the industry. Along with each installation, ClamVision® technicians provide solid training to familiarize the crew with the system. Technicians are available by phone and can be on site upon request. ClamVision® technicians also offer services like seafloor imaging and hydrographic surveying to help gather all important information to the jobsite.

### ADDITIONAL CLAMVISION® FEATURES:

- ✓ Cable Arm Tide Gauge with remote transmission to dredges.
- ✓ Fully wireless data and video communications.
- ✓ Robust ClamVision® computers to handle tougher work environments.
- ✓ Dredge Quality Management (DQM), formerly “Silent Inspector”, compatible for scows and dredges.
- ✓ Full service from Cable Arm® ClamVision® technicians minimizes needless downtime.
- ✓ ClamVision® software can be integrated to custom job applications.
- ✓ Clamshell bucket depth available using pressure depth or cable counting systems.
- ✓ CALC (Cable Arm Line Counter)

*Cable Arm Positioning 3452 West Jefferson Ave. Trenton, Michigan 48183*  
Phone: 734.676.6108 Email: [info@cablearm.com](mailto:info@cablearm.com) Web: [www.cablearm.com](http://www.cablearm.com)