



Sumitomo Drive Technologies

Sumitomo, Hansen and Seisa. Three brands, one global power transmission solutions provider. Sumitomo Drive Technologies has facilities strategically located throughout the world, providing comprehensive products and services in your region.



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- ASSEMBLY & SERVICE
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Global Headquarters,
Tokyo, Japan

Sumitomo Machinery Corporation of America
www.SumitomoDrive.com

For worldwide locations, please visit www.sumitomodrive.com/worldwide
Contact your local representative at www.sumitomodrive.com/representative
Tel: 1-800-SM-CYCLO (762-9256) 20.001.51.001 SMART Brochure 2019

Sumitomo Drive Technologies



SMART

System Maintenance And Reliability Technologies



*We take asset management seriously,
because we know you do.*

*Avoid catastrophic failure, minimize risk,
and increase machine uptime.*

System Maintenance And Reliability Technologies (SMART)

What is SMART?

SMART is a range of products and reducer options that were developed to help end users in their reliability and asset management initiatives within their plant's daily operations.

Why is SMART important?

SMART Products are designed to help with maintenance initiatives and prevent unplanned downtime. Industry 4.0 is here, and our SMART products will help with the integration of predictive maintenance into any facility.

What does SMART analyze?

We've got you covered. SMART can analyze all the major data points such as Vibration, Temperature, and Oil Particle Count. Customizable systems to allow for monitoring multiple components, gearboxes, motors, mounted bearings, etc.

What makes us SMART?

We have multiple ISO18436 certified vibration analysts on staff. Also, we've partnered with industry leading sensor suppliers to provide the best methods for data collection and analysis for our users.

Which SMART is right for me?

We have two distinct SMART packages. The difference being who does the thinking. If you want to do the thinking we have DriveSMART which allows for consistent data collection. If you want to let us do the thinking, we have CycloSMART® which provides component condition data via remote access without the need for any further analysis.



Sumitomo Drive Technologies has partnered with industry leading sensor suppliers to provide superior condition monitoring for Large Industrial Gearboxes. There are 3 options available to our customers.

Each option helps Reliability teams with the consistent collection of data for Vibration Analysis, as well as Oil Condition and Cleanliness.

All DriveSMART options include: oil sampling pitot tube, and oil breather package that incorporates oil fill/drain ports.

DriveSMART Options

Option 1:

Machined Accelerometer Mounting Pads Only

Option 2:

Opt 1 + Accelerometers Wired to Junction Box with multi-position switch

Option 3:

Opt 2 + Outputs to Customer PLC or DCS

Installation-ready junction boxes shipped with the gearbox.

All cables are standard 10' in length, includes industry standard bnc for connection at the accelerometer. Longer lengths are available upon request.



OPTIONAL CycloSMART®
CONFIGURATION



SENSOR



DIAGNOSTICS



ETHERNET



SOFTWARE

ENCLOSURE

NEMA 4X rated enclosures with cord grips for cable protection.



DriveSMART
VIBRATION SENSOR

ISO17025, Single Axis Accelerometer, with 10ft cable.

DES-CASE BREATHER

Industry leading desiccant breather for gearbox protection and long life.

LIGHT TREE

Optional for visual alarm notifications.

DIAGNOSTIC UNIT

Multiple Channels of Vibration, EthernetIP, ProfiNet, and ModBus communications available, History Data storage location.

GEARBOX ADAPTER

To allow for ease of oil changes.

MOUNTING PADS

For ease of sensor placement.



DriveSMART

CycloSMART®

Fully customizable vibration monitoring system providing predictive maintenance.

Provides an accurate condition signal without the need for further analysis.



CycloSMART® is a condition monitoring system that provides predictive maintenance by notifying customers—via local ethernet or broadcast—the health of the asset. Thus, minimizing risk while avoiding catastrophic failure.

CycloSMART® is fully customizable and provides real-time condition data of all of our reducers or any piece of rotating equipment. It provides an accurate condition signal without the need for further analysis. Leave the thinking to us!

CycloSMART® Benefits

- **Safe**
Monitor assets from the safety of your desk via networked connections.
- **Predictive**
Machine diagnostics for early warning and detection to avoid failure.
- **Cost-Effective**
Lower total cost of ownership.
- **Compatible**
16 inputs/outputs, communication via EtherNet/IP and Profnet available.
- **Reliable**
Schedule machine downtime to avoid lost production.
- **Optimization**
Customizable systems to meet many different application needs.
- **Expandable**
Multi-reducer and component monitoring.

EtherNet/IP™



the CHECK ENGINE LIGHT for SPEED REDUCERS



CycloSMART® Options

Option 1:
Vibration + Temperature Input

Option 2:
Vibration + Oil Level Input

Option 3:
Vibration + Oil Condition

All CycloSMART® systems are highly customizable with many different options for data monitoring. Popular examples are shown.

CycloSMART® Specifications

Diagnostic Electronics

Operating Voltage [V]: 24 DC±20%
Current Consumption [mA]: 200 (24V)

Power Supply

Input voltage range: 100...240 AC (±10%)

For more info: SMA.CycloSmart@shi-g.com

