

SmartDiagnostics® Software

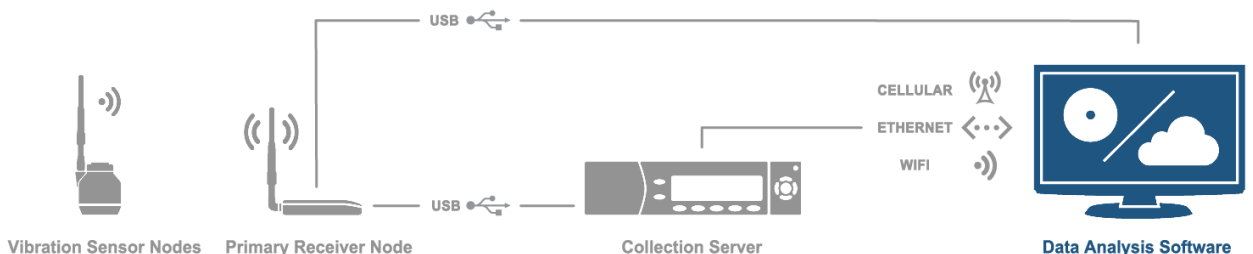
The SmartDiagnostics® family of innovative wireless sensor products enables cost-effective predictive maintenance for industrial equipment. The system provides continuous remote monitoring of key performance indicators to track the operating health of equipment.

- Continuous monitoring of machine health
- Simple, user-friendly interface
- Time series and frequency spectrum analysis
- Powerful alarm and notification capabilities
- Valuable features for both expert and novice users



Give Your Machines a Voice™

Easy to Use	Scalable	Open Interface
<p>SmartDiagnostics® software features intuitive navigation and powerful configuration templates that make it very easy to learn and use. Everything is designed with the goal of simplifying the user experience and making it easy to get from one screen to another, allowing a new user to quickly become an expert.</p>	<p>KCF's software uses a multi-tiered hierarchy structure that easily accommodates installations with thousands of measurement points. Navigation through the system is quick and easy, and expanding an existing system to include new monitoring points is simple and straightforward.</p>	<p>SmartDiagnostics® has an open interface to allow data to be passed to a wide range of Enterprise Asset Management (EAM) software for maintenance and reliability programs. Support is built in for industry standard communication protocols like OPC and ODBC, with custom interfaces available for software packages such as SAP, IBM Maximo, and Oracle Enterprise Asset Management</p>



SmartDiagnostics® Software Specifications

Cloud Version

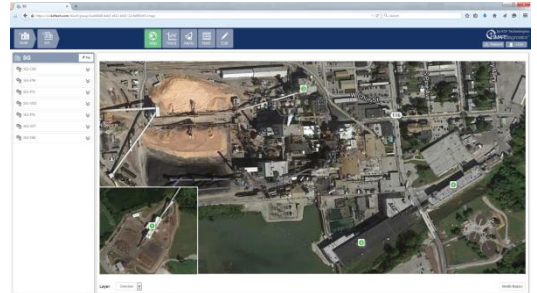
Description	Web-based application, allowing viewing of data by authorized users from any internet-enabled computer. Data is collected by SmartDiagnostics® PRNs and Collection Servers and uploaded continuously to a secure web server.
Supported Web Browsers	<ul style="list-style-type: none"> Internet Explorer 9.0 or above Google Chrome Mozilla Firefox Opera 11.0 or above Apple Safari

Local Version

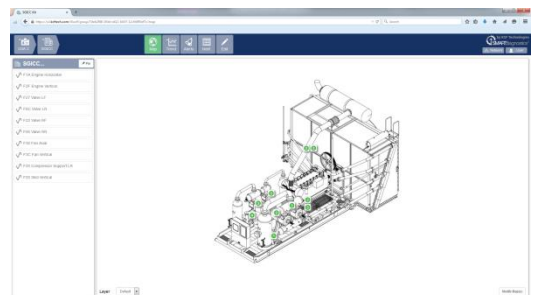
Description	Locally-hosted application on an individual customer PC, allowing viewing of data on that computer only. Data is collected by a PRN connected to the local computer and stored directly on that machine.
Operating System	Windows Vista or later
Minimum Requirements	<ul style="list-style-type: none"> 2.6 GHz dual processor 4 Gb (32-Bit) or 8 Gb (64-Bit) RAM 50 Gb of available hard drive space (500 Gb recommended; consult KCF based on system size and sampling requirements)

Features and Capabilities

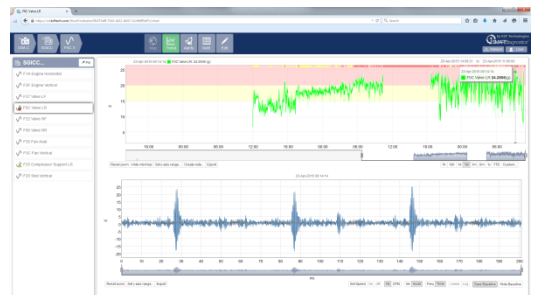
System Configuration	Fully customizable system setup with multi-level hierarchy ideally suited for both small diagnostic kits and large, multi-facility installations.
User Access	Selective permission levels for users and administrators allowing varying degrees of access and control.
Sensor Control	Full control of sensor functions including sampling rate, collection frequency, averaging, and site survey mode.
Data Storage	Storage of every complete time series data set collected from a sensor node. Data is consolidated in an intelligent database structure that is seamless to the user, allowing instant access to any data that has been collected since system startup.
Data Analysis	<ul style="list-style-type: none"> Trending of advanced user-specified health indicators Viewing of individual time series or spectrum data points Multiple data views including customizable system maps and trend charts Intelligent single-point or time-averaged baselining
Alarms and Notifications	<ul style="list-style-type: none"> On-screen health icons with warnings and alarms for exceedances Email notification of warnings and alarms
Vibration Indicators	<ul style="list-style-type: none"> Peak and RMS Acceleration and Velocity Peak and RMS Acceleration and Velocity within a frequency band Crest Factor Kurtosis Skewness
Additional Indicators	<ul style="list-style-type: none"> Temperature Internal Battery Voltage Pressure



System Map with Google Earth® plant image and health indicators



System Map with equipment schematic and health indicators



Time domain data analysis with warning and alarm levels



Frequency domain data analysis