

4Sight Calibration Management Software



4Sight calibration and maintenance management software provides visibility to the assets, data, and resources that affect maintenance, process efficiency and regulatory compliance.

4Sight provides a highly flexible information system with the tools for managers to plan, review and adapt the maintenance workflow. Technicians work efficiently to calibrate and maintain, using defined and automated procedures.

4Sight provides mobile paperless solutions for automating field activity and ensuring the highest quality and integrity of data.

4Sight provides the highest accuracy reference standards and fully automated test bench solutions for the laboratory and workshop.

Calibration management with 4Sight is simple, cost effective and scalable for a single user or for a global multi-site operation.

Benefits

- Reduce maintenance costs and automate processes
- Improve process efficiency, yield and quality
- Comply with regulations FDA, ISO, GAMP, 21 CFR Part 11
- Reduce management time
- Operate safely
- Simplify training
- Trace calibrations, actions and resources
- Plan maintenance and prevent downtime
- Define processes and procedures



Compliant Web-Based Calibration Management

Managing your installed base of instrumentation is difficult at the best of times, and when you factor in organizing technicians, production schedules and reporting, it's a significant challenge. Worse still, you're expected to make efficiency improvements, minimize downtime and be ready for the annual audit.

4Sight calibration management ensures data integrity, improves information flow, automates processes and provides a suite of management tools for quickly analyzing data for continuous improvement.

4Sight can be provided as an online Software as a Service (SaaS) solution. With proven security, this solution has a significantly lower investment cost and no IT support costs in terms of server support, upgrade management and data backup. With the correct credentials, users can login from any Internet browser without the usual problems resulting from application software, location or PC compatibility. When an Internet-hosted solution is not an option, 4Sight can be installed directly on a company server.



Audit-ready, real time calibration and maintenance management



Mobile paperless automated field calibration



Fully automated workshop calibration



Fully automated workshop calibration

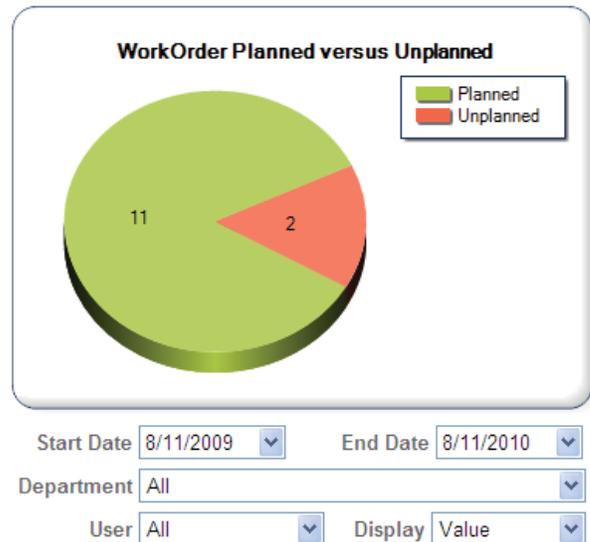


Planning and Scheduling

4Sight provides automated planning to reduce administration and management effort. Flexible filter options mean that technicians only see what is important to them, i.e. ,work due/overdue. They receive clear work orders with automated workflows to ensure that the correct duties are performed and that data is captured with the least effort. 4Sight simplifies calibration and preventative maintenance, from the planning and resource allocation stages through to data capture and post work assessment and reporting. Comprehensive filtering and assigned user rights allow a single system to be used over multiple sites. This means that supervisors and technicians only see information relating to their site or sub-site, whilst senior managers can view and compare performance over all sites from a centralized database. This not only reduces the time to manage and collate performance reports, but also ensures audit readiness and that all sites are following the same standardized procedures.

Tag	WorkOrderid	Type Prefix	Description	Name	Status
AL0002	P11070006	PT	Pressure Transmitter	AAA, Loy Yang 0 to 2 B	Downloaded
AT-MONST-001red	W10370013	AT	Analyser Transmitter s...		Unplanned
AT-MONST-001red	P111770006	AT	Analyser Transmitter s...	Analytical	Issued
AT-MONST-006	P10330011	AT	Analyser Transmitter s...	Analytical	Downloaded
calibrator pressure switch	P10380044	PSH	Pressure Switch High	calibrator pressure swi...	Downloaded
calibrator pressure tx		P	Pressure	calibrator pressure	OverDue/Cancelled
calibrator temp 2		T	Temperature	calibrator temp	OverDue/Cancelled
calibrator temperature 1	P10380049	P	Pressure	calibrator temp	Downloaded
calibrator voltage tx current		IV	current to voltage	current to voltage	OverDue/Cancelled
calibrator 1 switch high		PSH	Pressure Switch High	CALIBRATOR VOLT S...	OverDue/Cancelled
CAL-TEST-0001		AIT	Analyser Indicator Tran...	CALIBRATOR VOLT S...	OverDue
CAL-TEST-0001	P11020002	AIT	Analyser Indicator Tran...	CALIBRATOR VOLT CU...	Downloaded
cool room temp 1a	P10390001	TI	Temperature Indicator	Cool room temp	Issued
cool1	W10370006	AIR	Analyser Indicator Rec...	Work Request	Requested
cool1	W10370014	AIR	Analyser Indicator Rec...		Entered
cool to hz calibrator generated		H	repeater	repeater calibrator	OverDue
high switch 2	P10380046	PSH	Pressure Switch High	CALIBRATOR VOLT S...	OverDue
in loop 002		AIC	aic	High Switch Calibration	Downloaded
				loop monthly	OverDue

Schedule technicians



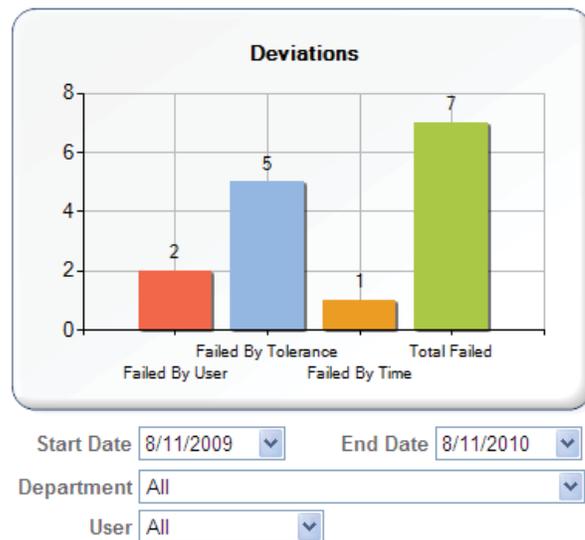
Optimize plant availability

Performance Management

Powerful Key Performance Indicators (KPIs) update in real time to provide managers with a detailed view of operations. Performance of the installed base and resources can be analysed and compared across the whole business or at different levels; for example, by site, by plant, by process, and by team.

Deviation Management

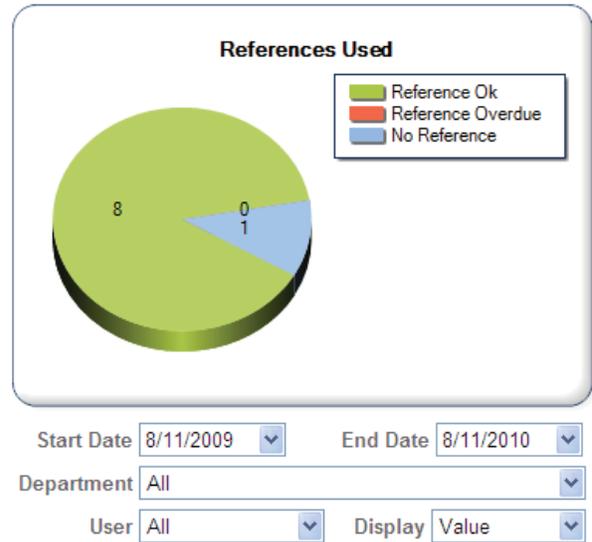
4Sight deviation management ensures that calibration failure notifications are sent in a timely and controlled way. Users can record the cause of deviations, investigate the reason and work to a resolution. The audit trail demonstrates that a robust solution is in place to manage deviations and that strict procedures are enforced for corrective action and preventative action (CAPA).



Manage compliance

Traceability for Reference Standards

Reference standards used during a calibration are traceable to instruments and work orders. This powerful KPI allows managers to prevent and trace issues with references that are overdue for calibration or for those found to be out of tolerance. Auditors expect a robust system for managing failed references. The "Reference Used Report" quickly displays the list of calibrations associated with the reference, ensuring a speedy investigation and the planning of rework actions.



21 CFR Part 11

Compliance with 21 CFR Part 11 is mandatory for many businesses and requires the highest levels of data integrity and security. 4Sight's 21 CFR Part 11 module provides the data integrity, security and audit trail required for regulated industries to demonstrate compliance. Electronic signatures can be applied to any section of the system allowing the system to be scaled to fit different regulation requirements within the business. The reasons for actions, time stamps and the "Before" and "After" values, are recorded in the audit trail for full traceability.

Electronic Signature

CompuCal Software Solutions

I Matthew Dornan, confirm that the details I have entered are correct

User Id: mdornan

Password:

Reason: Data Entry

8/11/2010 4:49:25 PM

Electronic signatures

Manage reference standards

LogDate	User	TableName	Identifier	Action
04/05/2011 08:55:13	Matthew Dornan	User	mdornan	VALID LOGON
04/05/2011 09:02:40	Matthew Dornan	User	mdornan	VALID LOGON
04/05/2011 08:15:40	Matthew Dornan	User	mdornan	VALID LOGON
04/05/2011 07:48:14	Matthew Dornan	User	mdornan	VALID LOGON
03/05/2011 13:12:49	Matthew Dornan	User	mdornan	LOGOUT
03/05/2011 12:58:20	Matthew Dornan	WorkOrder	S-pda-01-Handheld pda	WORK ORDER NO : P11/19/001 ISSUED
03/05/2011 12:58:20	Matthew Dornan	Routine	Handheld pda-S-pda-01	Edit Routine
03/05/2011 12:16:48	Chris Coleman	Routine	Calibrator Pressure 0 - 4...	New Routine
03/05/2011 11:44:18	Chris Coleman	Instrument	PT-C5C001	New Instrument
03/05/2011 11:13:16	Chris Coleman	User	ccoleman	VALID LOGON
03/05/2011 10:45:30	Matthew Dornan	User	mdornan	VALID LOGON
03/05/2011 08:44:46	Chris Coleman	User	Chris Coleman	Edit User
03/05/2011 08:44:21	Chris Coleman	User	ccoleman	VALID LOGON
03/05/2011 08:43:48	Matthew Dornan	User	mdornan	LOGOUT
03/05/2011 08:42:45	Matthew Dornan	User	Chris Coleman	New User
03/05/2011 08:41:19	Matthew Dornan	User	mdornan	VALID LOGON

DataField	TableName	Old/Value	New/Value
GroupID	User	1	5
GroupName	User	Admin	US Culture

Date stamped audit trail

Email Alerts

4Sight can be configured to send notification emails in response to deviations and at set intervals. Responsible owners can be assigned according to the nature of the alert.

A "Calibrations Due" email report is sent automatically, for example, on the first of every month. It is a detailed list of devices due for calibration within the set interval.

Out-of-tolerance devices are automatically detected and the user is required to complete a report. This is then sent as an "Entered Deviation" email with PDF attachments of the report and the calibration sheet. For calibrations requiring a second signature, a "Verified Deviation Report" is sent after verification. A final "Clear Deviation" report completes the workflow.

Historical Trending

The Historical Trending module allows a device's performance to be monitored over time. This powerful tool is the key to improving efficiency and planning preventative maintenance.

- Predict failures and problems
- Plan preventative actions
- Determine the most cost effective and reliable devices and manufacturers
- Extend calibration intervals
- Optimize the process

Interval Analysis

The unique Interval Analysis module allows users to quickly report on device performance by scientifically analyzing historical data and drift. This flexible tool produces reports to assist calibration managers, tasked with increasing calibration intervals, to make a researched and qualified recommendation. This reporting and analytical job that used to take a lot of time and resource, can now be done in just minutes without risk of miscalculation or transcription errors.

Subject: Entered Deviation Report - Work Order: U/08/34/0001
 Attachments: Report.pdf (94 KB); CalSheet.pdf (1 MB)

Deviation Mail

TAG No.: 1Perf-001 Deviation No.: 34

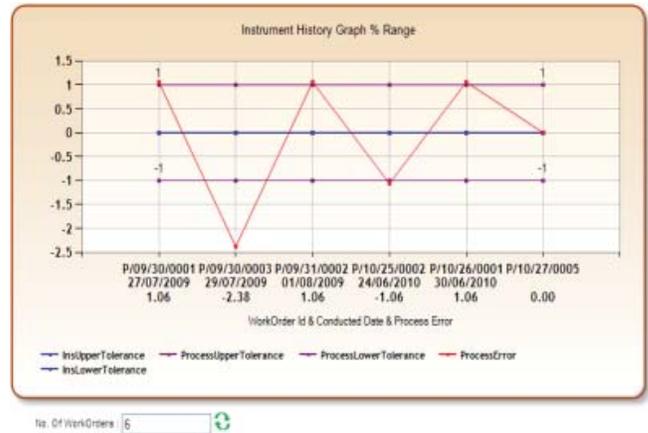
Deviation Description:
 Errors based on Calibration & Adjustment BEFORE Adjustment Calibration
 Subject: Calibrations due for GE Sensing

Company: GE Sensing

Month :Dec

Tag	Description	Routine	Business Unit	Area	Location	Co
CO00017	.225-.235 plug gauge	Plug Gauge Calibration	Knee Bearing Systems	Inspection	none	01
CO00018	.236-.240" plug gauge	Plug Gauge Calibration	Knee Bearing Systems	PTM 14	none	01
CO00019	.245-.255" plug gauge	Plug Gauge Calibration	Knee Bearing Systems	Inspection	none	01
CO00020	.311-.315" plug gauge	Plug Gauge Calibration	Knee Bearing Systems	WS#1	none	01
CO00021	.348-.363" plug gauge	Plug Gauge Calibration	Knee Bearing Systems	PTM 14	none	01

Automate email alerts



Analyser Indicator : IA-003 has been calibrated 3 times as per Historical Data Table below:

Date of Work Order	Range(C)	Test Points	Results	Maximum Drift	Actual Interval Days	Maximum Daily Drift
01/02/2009	0.100	75 90 50 10 25	0.01 0 0 0 0	0.01	30	0.000333333
03/03/2009	0.100	75 90 50 10 25	0.0 0 0.21 0	0.21	30	0.007
01/04/2009	0.100	75 90 50 10 25	0.02 0 0.03 0 0.05	0.05	29	0.001724138

Calculation Used for 'Factor of Safety':
 ((Upper Process Tolerance Value / (Maximum O/P Drift / Actual Interval Days) / Routine Interval Days)
 ((1.000000 / (0.210000 / 30)) / 30)

Generated By:		Date:	Calculated Results	
Matthew Dornan		10/04/2009 10:04:59	Max Daily Drift	0.007
Quality:			Existing Int:Months	1
Validation:			Tolerance	-1.00 TO 1.00
Production:			Factor of Safety	4.76
Calibration:			Suggested Interval	2
Maintenance:				

Analyze instrument performance

4Sight Mobile

DPI 620 Advanced Modular Calibrator, HART® Communicator and PDA



Modularity brings a whole new perspective to multi-function test and calibration, providing the flexibility to re-range in use, adapt by application and expand over time. This facilitates inventory reductions, lower cost of ownership and simplified training.

The DPI 620 multi-function calibrator has key innovations that provide significant operating benefits now and into the future.

Best-in-class multifunction calibrator

- Calibrator, HART communicator and PDA
- Small, lightweight and robust
- Simple-to-use colour touch screen
- High accuracy for wide application coverage and regulatory compliance
- USB, 4 GB expansion, WiFi IEEE802.11g
- ATEX and IECEx approved

A scalable solution now and in the future

- Two digital channels for connecting new probes, modules, generators and controllers
- Future USB and WiFi measurement modules
- Simple upgrades—Windows OS, calibrator application, HART Device Description Library

The DPI 620 modular system can replace a number of discrete reference instruments to offer a complete solution for electrical, frequency, pressure and temperature calibration. In addition, it provides a fully featured HART communicator and all the computing power of a PDA.

The DPI 620 calibration system integrates seamlessly with 4Sight calibration management software for configuring, testing and documenting installed instruments.

- Download work orders
- Ultra fast automated procedures
- As Found and As Left calibrations
- Pass/fail indication
- Graphical analysis
- HART configuration, set-up and calibration
- Windows CE, allowing mobile applications and supporting documentation including safety notes, spreadsheets, datasheets, loop diagrams and images.



Item	Value	Units
Device setup		
PV	-0.01	bar
DP1620 CH1	0.0	°C
DP1620 CH2	4.0007	mA
DP1620 P1	0	
DP1620 P2	0	
DP1620 IDOS	0	
AO	3.998	mA
LRV	0.00	bar
URV	30.00	bar

HART
COMMUNICATION PROTOCOL

PDA's and mobile devices

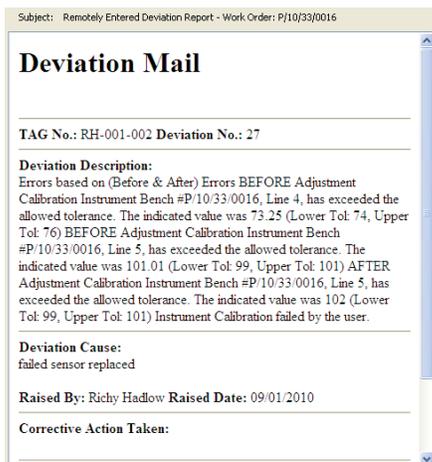
4Sight's mobile module provides the ability to move to a paperless system, automating the process of data collection and deviation handling. The easy-to-use module allows technicians to record maintenance and calibration activities in the field, using hand-held mobile devices.



Failed calibrations will trigger a deviation in the field and force the technician to enter details of the failure for others to investigate after notification.



When the technician synchronizes with 4Sight, an automated email alert will be sent to those responsible, notifying them that a failure has occurred. The deviation will remain open until further investigations have taken place, but without effecting the schedule of the routine calibration.



4Sight Laboratory and Workshop Solutions

PACE Controllers/Indicators



Modularity brings a whole new perspective to laboratory and workshop calibration, providing the flexibility to re-range in use, adapt by application and expand over time. This facilitates inventory reductions, lowers cost of ownership and simplifies training.

The PACE controllers/indicators have key innovations that provide significant operating benefits now and into the future. PACE is at the heart of the 4Sight laboratory and workshop solution.

Interchangeable pressure modules

- Simple to re-range
- Single or dual range configuration
- Indicator or controller
- Change the module, not the calibrator
- Add new modules as and when the business requires
- Pressure precision for operation over 10°C to 50°C (50°F to 122°F) for one year
- Up to 0.005% Rdg + 0.005%FS
- Control stability 0.001%FS

Automated pressure generation

- High-speed control response
- 25 mbar to 210 bar (0.36 psi to 3626 psi)
- Absolute ranges through barometric reference

The PACE pressure reference is highly adaptable to application requirements and is scalable in the future, as business needs change. It can be configured as a standalone pressure generator and reference indicator or it can be incorporated into workstations to provide a complete calibration solution across multiple parameters and disciplines.

PACE integrates seamlessly with 4Sight calibration software to provide a fully automated workstation.

Specifications

Online Hosted Solutions

- Windows NT, Windows 2000, XP Professional
- Internet Explorer 6.0 browser or Internet Explorer 7 browser
- Adobe Reader 8.0
- 512 MB memory or greater (1 GB recommended)

On-premise Solutions

It is recommended that the database and application are installed on separate servers, but users can decide to install and run both on the same server.

Application Server

Server minimum requirements

- Microsoft Windows Server 2003 or Windows XP Professional
- Dual processors recommended
- 2 GB memory (4 GB recommended)
- 20 GB or greater disk space
- Adobe Reader 8.0
- Internet Information Services (IIS) Version 5 or higher

SQL Server

Server Minimum Requirements

- Microsoft Windows Server 2003 or Windows XP Professional
- Database software Microsoft SQL Server 2005
- Dual processors recommended
- 2 GB memory (4 GB recommended)
- 20 GB or greater disk space
- Adobe Reader 8.0
- Internet Information Services (IIS) Version 5 or higher

Optional Services

Set-up and Training

The online hosted solution is very simple to set up and customers are typically up and running in a few hours.

Installation help can be offered for the on-premise solution, particularly for larger multi-user, multi-site implementation.

Training can be customized for different needs, number of users and number of sites.

Software Maintenance

A software maintenance agreement provides upgrades and support over the term of the agreement.

Validation Service

A tailored validation service is available to help regulated industries implement a software-based maintenance system.

CMMS Integration

We can help to import existing data and provide integration solutions for higher level CMMS systems such as SAP and Maximo.

Ordering Information

Please request a quotation and state the quotation number when ordering.



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