

NEW Emerson Process Management Calibration Management Software

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- Streamline Daily Maintenance Activities
- Eliminate Unnecessary Maintenance Tasks
- Configure, Calibrate, Document, & Perform Diagnostics
- **THE** Universal Interface to All Your Field Instruments
- Two Convenient AMS Options
- Upgrade Easily to Add Features or More Tags

Imagine using one software platform to monitor all the devices in your plant. Emerson's AMS software is the universal PC platform that can be used to manage your HART®, FOUNDATION™ fieldbus, and conventional instruments. AMS is a versatile software application that allows you to configure, calibrate, document, and perform diagnostics on any field instrument in your plant. AMS delivers high performance information from critical instruments right to your PC.

Connecting to Devices – connect to a single device through a modem. Connect to many devices through a network of multiplexers to communicate with up to 20,000 tags in an AMS database.

Calibration – communicate directly between your documenting calibrator and AMS database to eliminate paperwork and the possibility of error. You can easily group your devices into calibration routes for maximum efficiency and then rely on the AMS Audit Trail for documentation of all calibration events.

Handheld Communicator Interface – easily upload and download device information between AMS and your 375 Field Communicator or 275 HART Communicator.

Audit Trail – keep accurate, ongoing records using the AMS Audit Trail option to automatically generate a historical record for each device. As you perform tasks, the Audit Trail option works in the background to automatically create the necessary documentation trail.

Calibration Instruments

AMS Application - [Device Connection View]

File Edit View Window Help

Hardware

- HART Communicator
 - Module
 - B1-SH-PT-102
 - TT-302
- Plant Database
 - Area
 - Cherokee Plant
 - Utility Areas
 - Heat Exchangers
 - Boilers
 - Boiler 1
 - PT-894
 - FT-023
 - LT-829
 - FT-291
 - TT-302
 - 27130202
 - B1-SH-PT-102
 - Boiler 2

- HART Modem 1
- PT-103

Handheld Communicator Interface allows you to easily upload and download device information between AMS and your 375 Field Communicator.

NEW Emerson Process Management Calibration Management Software

Transfer calibration data between your calibrator and the AMS database.

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Calibration Instruments

The best way to maintain your software investment is through our Foundation Support offering which includes automatic software upgrades, direct phone access to AMS technical support, and access to the support web site.



Specifications

AMS Bronze Option includes:
Up to 25 HART® devices
Single workstation
Single device modem
Foundation Support

Ordering Information

AMS Bronze

Supported Calibrators

- | | |
|-----------------------|---------------------------------------|
| • Beamex | MC5 |
| • Druck | DPI605, DPI615, MCXII, TRXII |
| • Fluke | 702, 743, 744 |
| • Rosemount Validator | P330, P370, T460, T490 |
| • Transmation | 195/196 |
| • Beta Calibrators | BetaFLEX, BetaGauge II, MasterCal 922 |

NOTE: Call Transcat for an updated list of supported calibrators

Specifications

AMS Silver Option includes:
Up to 100 HART® devices through multiplexer connections
Single workstation
Audit Trail Option
Calibration Assistant SNAP-ON™ Application
Handheld Communicator Interface Kit
Foundation Support

Ordering Information

AMS Silver

Cornerstone/Transcat Calibration Management Software

Cornerstone Cal Station and Transcat Cal-Plus set the standard for Calibration Management Software

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- Calibration Management for All Types of Process Instruments Including Switches
- Document Traceability on All Calibrations
- Schedule, Track, and Record Maintenance Activities on Non-Process Equipment
- Full Compatibility with Windows™ 98, ME, NT, 2000 and XP
- Multi-User Network Ready
- Use With or Without Documenting Calibrators
- Compatible with Documenting Calibrators from Transmaton, Fluke, Druck, Unomat and Beta
- Training and Implementation Support are Available

Cornerstone Cal Station provides a turnkey solution for managing process calibration activities. Information on your plant, processes, installed instruments, and calibration procedures are organized in a powerful database. User definable fields give you the flexibility to bring forward existing instrument and plant information into the Cornerstone database.

Maximum benefits are realized when the software is used in conjunction with a documenting calibrator. Information on scheduled instruments and the associated calibration procedures are downloaded to the calibrator. In the field, the test is executed automatically. As Found and As Left data are recorded, errors are calculated and displayed, and a pass/fail notification is provided, all in a matter of seconds! When work is completed, results are uploaded into the database, creating a complete historical record, and updating scheduling information.

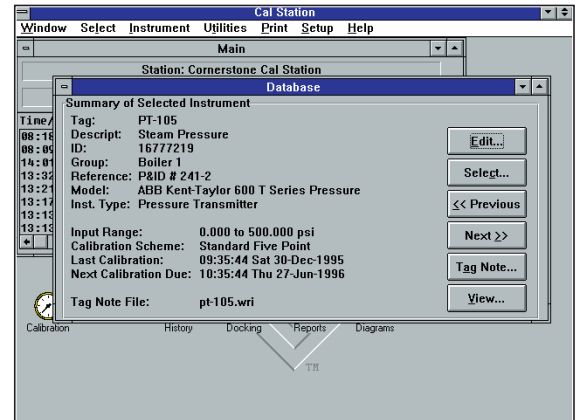
For those calibrations done with conventional calibrators, a printed calibration form can be created with all set-up information, test points, error tolerances, etc. Manually record the test results on the form. The manual entry function then guides you through entry of the data. Again, a historical record is created and all schedules are updated.

A wide selection of standard reports is provided, plus you can configure and save frequently used report definitions and add them to the menu for quick access. Calibration reports or certificates can be printed or viewed on-line.

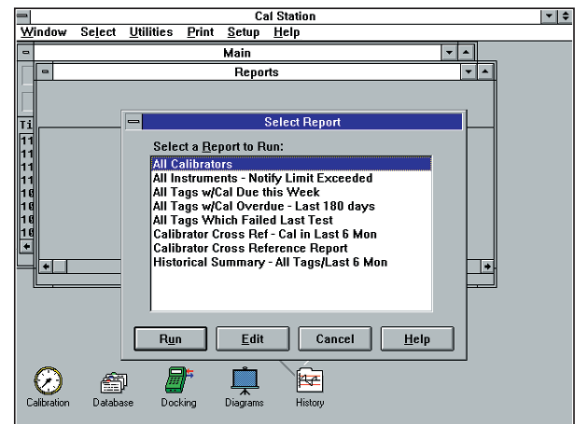
Configuring your system is easy!

What you'll need:

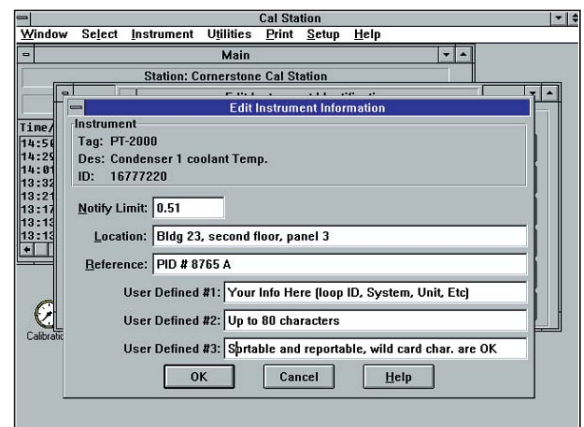
1. The Cal Station database
2. Interface libraries for any documenting calibrators you will be using
3. Network license if desired



Database



Report



Instrument Information

Calibration Instruments

Cornerstone/Transcat Calibration Management Software

Supports all of these documenting calibrators...



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Plus conventional calibrators like these



Calibration Instruments

Ordering Information

Order #	Description	Price
MP100200	Cal Station Database Only	
Cal Station/Callib (Calibrator Interface) Combinations		
MP194020	Cal Station with Fluke 702 Interface	
MP194030	Cal Station with Fluke 743/743B/744 Interface	
MP194310	Cal Station with Unomat MCX Interface	
MP194320	Cal Station with Druck DPI 605 Interface	
MP194410	Cal Station with Transmation Interface	
MP194500	Cal Station with Beta Interface	
ADD On Calibrator Interfaces		
MP114320	Druck DPI 605 Interface for Cal Station	
MP114310	Unomat MCX Interface for Cal Station	
MP114020	Fluke 702 Interface for Cal Station	
MP114030	Fluke 743/743B/744 Interface for Cal Station	
MP114500	Beta 135, 235, 922, BetaGauge II, Interface for Cal Station	
MP114410	Transmation 195, 196, 1292, 1294, 160, 180 Interface for Cal Station	
MP314410	Transmation 195/196 Update for 114410 purchased before June 1, 2001	
LAN/Multi-User Kits		
MP191403	Cal Station 3-User LAN Kit	
MP191406	Cal Station 6-User LAN Kit	
MP191410	Cal Station 10-User LAN Kit	
MP191180	Cal Station Group Setup Kit (Used to coordinate data from multiple stand-alone Cal Station databases into a single central file.)	
Network licenses allow multiple workstations to execute the program and access a single database on a network drive. Licenses are for concurrent users on a LAN. The software can be run from any workstation, but only 3, 6, or 10 users can execute the program concurrently.		

Cornerstone Calibration Configuration Management Software

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- Calibration Management for All Process Devices
- Configuration Management for HART Smart Devices
- Automated Test and Trim of HART Smart Devices
- Comprehensive Instrument Database
- Compatible with Calibrators from Beta, Fluke, Transmation, Druck, and Unomat
- Single User or Networked Configurations

System Overview

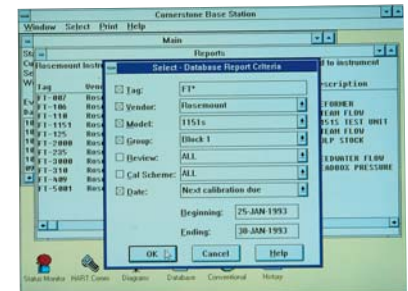
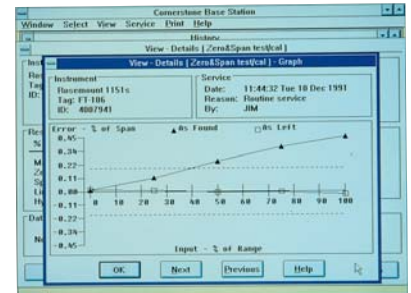
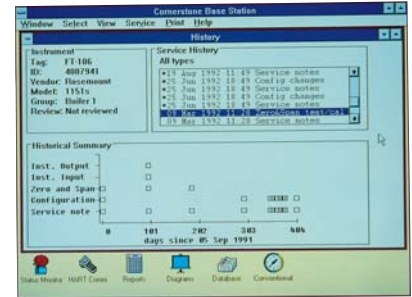
If your plant utilizes HART smart devices, consider Cornerstone Base Station. Base Station incorporates the same basic database and calibration capabilities as the Cal Station package, but adds significant capabilities for the management of HART Smart devices. These capabilities include but are not limited to:

- The ability to read and write configuration information via compatible modem with any HART smart device (rev. 4 or 5)
- Additional database fields for configuration information on each device (ID#, sensor type, range, dates, etc.)
- The ability to trim HART smart devices directly
- The ability to recall previous configurations from the database and restore them to a device (valuable if you lose configuration info due to lightning, etc.)
- The ability to execute and record separate test and calibration results for sensor input and loop functions

Cornerstone Base Station is a comprehensive database for calibration and configuration management. Start with the Base Station database, and build your system by adding appropriate software modules from the listings that follow.

Ordering Information

Order #	Description	Price
MP100300	Base Station Software	
Cornerstone Multi-User LAN Kits		
Install Base Station on a server, and access it from any workstation on the network. Multi-user licenses determine the number of concurrent users (5 or 10) who can access and run the program.		
MP191103	Base Station 3-User LAN kit	
MP191106	Base Station 6-User LAN Kit	
MP191110	Base Station 10-User LAN kit	
HART Compatible Modems		
To connect to HART devices, each Base Station requires a HART compatible modem. The following are compatible:		
Viator RS-232-C HART Modem Package		
The Viator modem is a small external modem that works with the Base Station software package, and includes all necessary cables, leads, and adapters.		
MP5916E	Viator RS-232-C HART Modem Package	
Viator PCMCIA HART Modem Package		
HART compatible interface fits standard Type II PCMCIA slot. Includes utility software and test cable, configured as Com 1 or 2 only.		
MP5876E	Viator PCMCIA HART Modem Package	



Calibration Instruments

Cornerstone Calibration Configuration Management Software

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Model Support Libraries (ModLibs)

As supplied, Base Station supports the universal commands shared by all HART instruments. Optional software modules (called ModLibs) can be added as needed to enable the Base Station software to read, display, and configure all of the instrument specific parameters and functions in a given model of smart transmitter.

ModLib Ordering Information

MP120022	Rosemount ModLib Package (Includes models 644, 1151S, 2088, 2090, 3001S, 3001C, 3044C, 3044CR, 3051C, 3051T, 3051CLP, 3144, 3244MV, 8712C, 8800, 9701, 9703, 9712, 9739, IFT3000)
MP120032	Rosemount Analytical ModLib Package (Includes models 2054pH, 2054C, 2054T, 2081pH)
MP125222	Collection Package Includes: Endress + Hauser Cerabar S & Deltabar S, Foxboro-Eckardt DMU 130 & 140 Series, Fuji Electric FCX A/C, Hathaway Promac XZ6-U, Kayray 3680, MTL 418, Princo Smart 1, Samson 3780 Positioner, SMAR International LD301 & TT301, Viatran 970
MP125332	ABB Automation ModLib Package (Includes models 600T, DeltaPi K Series DP, KST, 652/653S, MassMeter, Fisher & Porter 50XM1000B, Hartmann & Braun TS11, TEU 211, TZID Positioner, AS800)
MP124012	Moore Products ModLib Package (Includes models 340 A, 340 B, 340 D, 340 X, 341 D and 344)
MP125002	Yokogawa ModLib Package (Includes models EJA, UNI Delta Mark II, YT200, ADMAG-AMII, ADMAG-AE, ADMAG-SE, YEWFO, YTA110, YTA310, YTA320, YTA70)
MP125302	Honeywell ModLib Package ST3000 Pressure and STT25H Temperature
MP191082	All ModLib Packages (Includes all models listed above)



Cornerstone ModLibs and package work with and require Cornerstone Base Station.

NOTE: Additional ModLibs are being developed. Call us if your model is not shown here.

Calibrator Interface Libraries (CalLibs)

CalLibs are optional software modules that enable Base Station to interface to selected calibrators. CalLibs enable the download of tag IDs and associated test procedures to "smart" calibrators, and the upload of completed test results, including as-found and as-left data.

CalLib Ordering Information

Order #	Description	Price
MP113500	Beta 135, 235, 922, and Beta Gauge II	
MP113020	Fluke 702 Series	
MP113030	Fluke 743, 743B and 744	
MP113310	Druck/Unomat MCX	
MP113320	Druck DPI 605	
MP113410	Transmation 195, 196, 1292, 1294, 160 and 180	
MP313410	Transmation 195/196 update for 113410 purchased before June 1, 2001	

NOTE: Additional CalLibs are being developed. Call for an updated listing.

Recommended System Hardware: IBM-compatible Pentium II or better, 128 MB RAM, hard disk with minimum 50 MB available. Windows™ 98 or higher, mouse or other pointing device, 2 additional serial ports, 1 parallel port. VGA color monitor is recommended. Compatible with Windows™ 98, Windows™ ME, and Windows™ NT, Windows 2000™ and Windows XP™

Cornerstone is a trademark of Applied System Technologies, Inc.
Rosemount is a registered trademark of Rosemount Inc.
HART is a registered trademark of the HART Communication Foundation.



Need a compatible calibrator?

For Fluke
see pages A43-A44
For Transmation
see page A66,
and Druck/Unomat
can be found
on pages A50, A68-A70.

Calibration Instruments

NEW Transcat TransCal V5 Calibration Management Software

TransCal V5 Basic

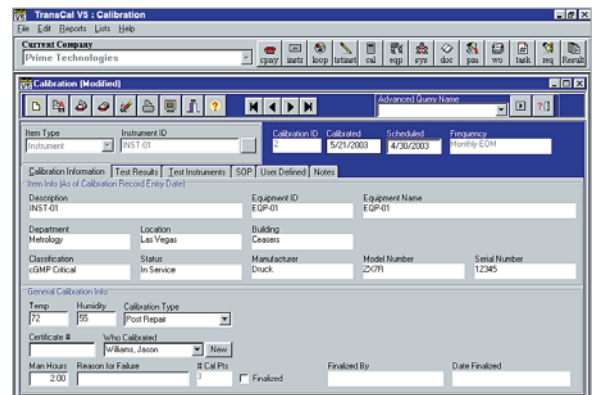
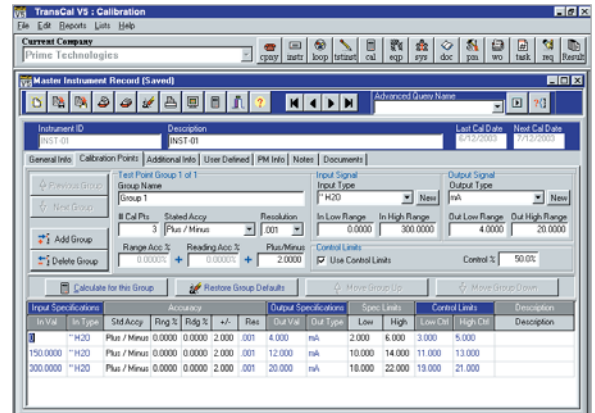
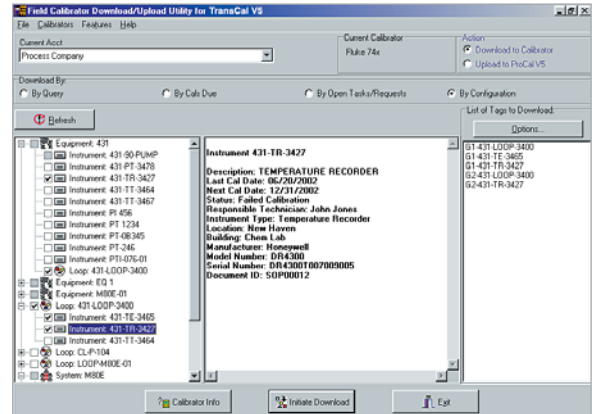
- Low Cost Professional Solution
- Powerful Yet Very Easy to Use
- Handles Records for all Types of Instruments
- Established Hierarchies for Systems, Equipment, Instruments, Loops and Test Standards
- Powerful Data Calculation and Data Tolerance Checks
- Advanced Queries and Customizable Reports
- Unlimited, Formatted User-Defined Fields
- Preventative Maintenance/ Workorder Options
- SOP & Document Management with Active File Links
- Employee Training Record Management Options
- Interfaces with Most Documenting Calibrators
- Many Other Features!

TransCal V5 Standard

- Highly Engineered Professional Solution
- Logical Design with Powerful Functionality
- Separates Data for Multiple Companies, Sites, Divisions, and More
- Multi-Tiered Security Access Features
- Handles Records for all Types of Instruments
- Established Hierarchies for Systems, Equipment, Instruments, Loops and Test Standards
- Powerful Data Calculation and Data Tolerance Checks
- Logs Test Standard Specifications
- Advanced Queries and Customizable Reports
- Unlimited, Formatted User-Defined Fields
- Sends Warnings, Alerts and Reminders
- Preventative Maintenance/ Workorder Options
- SOP & Document Management with Active File Links
- Employee Training Record Management Options
- Paperless and Wireless Remote Workstations
- Interfaces with Most Documenting Calibrators
- Many Other Features!

TransCal V5 Advanced

- Highly Engineered Professional Solution
- Logical Design with Powerful Functionality
- 21 CFR Part 11 Compliant with Full Audit Trail and Double Electronic Signature Capability
- Separates Data for Multiple Companies, Sites, Divisions, and More
- Multi-Tiered Security Access Features
- Handles Records for all Types of Instruments Established Hierarchies for Systems, Equipment, Instruments, Loops and Test Standards
- Powerful Data Calculation and Data Tolerance Checks
- Logs Test Standard Specifications
- Advanced Queries and Customizable Reports
- Unlimited, Formatted User-Defined Fields
- Sends Warnings, Alerts and Reminders
- Preventative Maintenance / Workorder Options
- SOP & Document Management With Active File Links
- Employee Training Record Management Options
- Paperless And Wireless Remote Workstations
- Interfaces with most Documenting Calibrators
- Many other features!



SQL and Oracle V5 Versions are located on Pages A61-A62.

Contact Transcat for more information.

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Calibration Instruments

NEW Transcat TransCal V5 Calibration Management Software



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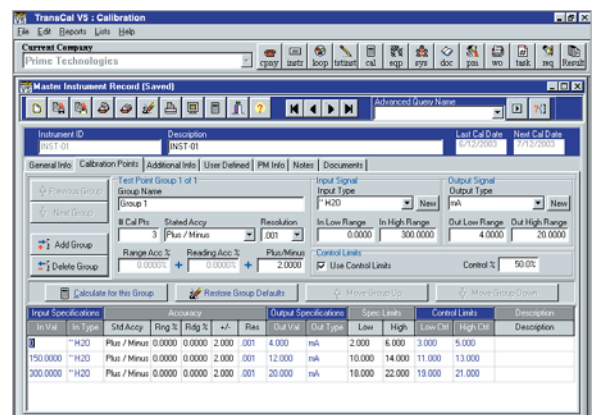
TransCal V5 Access Versions and Features

Specifications

Included Features	TransCal V5 Basic	TransCal V5 Standard	TransCal V5 Advanced
Number of Companies	1	Unlimited	Unlimited
Number of User Licenses	One Concurrent	1 or 5 Concurrent	1 or 5 Concurrent
Number of User Groups	Three Predefined	Unlimited	Unlimited
Number of Instruments	100	Unlimited	Unlimited
Number of Loops	50	Unlimited	Unlimited
Number of Systems	50	Unlimited	Unlimited
Number of Test Instruments	20	Unlimited	Unlimited
Specs on Test Instruments	No	Yes	Yes
21 CFR 11 (Password Re-entry, Audit Trails, Double Signature)	No	No	Yes
Configuration Manager	No	Yes	Yes
Control Limits	No	Yes	Yes
Import/Export/Mobile WS	No	Available	Available
Archive	No	Yes (Cals Only)	Yes
Field Calibrator Available	Yes	Yes	Yes
User Defined Variables	Yes	Yes	Yes
Maintenance Module	Available	Available	Available
Training Module	Not Available	Available	Available

Ordering Information

Order #	Description	Price
MPTC5BAS1	TransCal V5 Basic – One User Only	
MPTC5STD1	TransCal V5 Standard – One User	
MPTC5STD5	TransCal V5 Standard – Five Users	
MPTC5ADV1	TransCal V5 Advanced – One User	
MPTC5ADV5	TransCal V5 Advanced – Five Users	
MPTC5FLK	Field Calibrator Utility Fluke Driver	
MPTC5DRK	Field Calibrator Utility Druck Driver	
MPTC5TRN	Field Calibrator Utility Transmation Driver	
MPTC5MM	Maintenance (PM / Workorder) Module	
MPTC5TRG	Training Module	
MPTC5MWS	Mobile Workstation (Standard or Advanced)	
MPTC5BAR	Bar Code / Scan Utility	
MPTC5AVAL	Validation Package	
MPTC5SUP1	One Year Support Agreement (One User)	
MPTC5SUP5	One Year Support Agreement (5 Users)	



Calibration Instruments

NOTE: Prime Technologies SQL and Oracle Versions are located on pages A61-A62.

Prime Technologies, Inc. ProCal V5 Calibration Management Software

The program that does it all . . . so you don't have to!

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ProCal V5 was developed by a team of calibration professionals who wanted a program that would finally give them what calibration professionals need: more power & functionality, more speed, and easier set-up & operation. Through their guidance, ProCal V5 is now the most powerful, most flexible, most intuitively easy-to-use calibration program available.

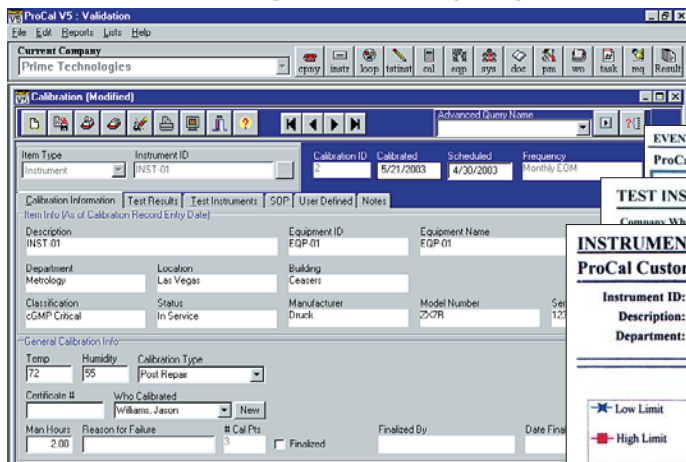
For single stations and large, networked multi-facility users!

Insure effective FDA and ISO record keeping compliance!

- Logical and Intuitively Easy to Use
- Versatile Design for use with All Types of Instrumentation
- Single User to Large Enterprise Database Solutions
- Multi-Tiered Security Access Features
- Established Hierarchies for Systems, Equipment, Instruments, Loops and Test Standards
- Powerful Data Calculation and Verification Controls
- Send Warnings, Alerts and Reminders
- Advanced Queries and Customizable Reports
- Unlimited, Formatted User-Defined Fields
- Preventative Maintenance (PM) and Workorder Options
- Paperless and Wireless Remote Workstation Capabilities
- SOP and Document Management with Active File Links
- Employee Training Record Management Capability
- Interfaces with Most Documenting Calibrators
- MANY OTHER FEATURES!

Whether you're looking for your first calibration management program or looking to upgrade from a current system, you'll find that ProCal V5 has everything you need.

Familiar Windows®-style toolbars and commands make navigation intuitively easy!



Complies with 21 CFR Part 11 (electronic records/signatures, audit trails, etc.) and other FDA regulations, as well as ISO/QS 9000.

Easy to Use.

Familiar Windows® features such as pull-down list boxes, check boxes, toolbars and speed buttons make ProCal V5 easy to learn and navigate.

Powerful.

Maintain data for thousands of process devices. Keep records for test instruments and even different departments or sites separately. Set up and manage SOPs. And never worry about overloading the system. ProCal V5 can handle it all.

Flexible.

Users can customize terminology to adapt to industry-specific needs. Change field names and add field labels.

Versatile.

Small user. Large user. ProCal V5 is available in a variety of database platforms to meet any requirement: MS SQL Server®, or Oracle®.

NOTE: Find MS Access Version on TransCal Software pages A59-A60

The collage shows several report screenshots. The 'CALIBRATION ALERT REPORT' shows 'ProCal 2000 Customer' with 'Items Calibrated During: 1/23/2001 - 10/23/2001'. The 'LOOP CALIBRATION REPORT' is for 'ProCal Customer'. The 'EVENTS DUE REPORT' is for 'ProCal Customer' for the period '10/1/2001 to 10/31/2001'. The 'TEST INSTRUMENT REVERSE TRACEABILITY REPORT' is for 'ProCal Customer' from '1/1/2001'. The 'INSTRUMENT TEST POINT TREND' report shows details for 'Instrument ID: 01', 'Description: Pressure Device', 'Department: Productions', 'Manufacturer: Moore Industries', 'Model Number: 968-021-000', and 'Serial Number: NA'. Below the reports is a line graph showing 'Error' on the y-axis (0 to 2) and 'Max As-Found Error' on the x-axis. The graph has four data series: Low Limit (blue star), High Limit (red square), Expected Output (green circle), and Max As-Found Error (orange triangle). The Max As-Found Error series shows a peak of 2.0. The Oracle logo is visible in the bottom right corner of the collage.

Get the Reports you need, in the format you want.

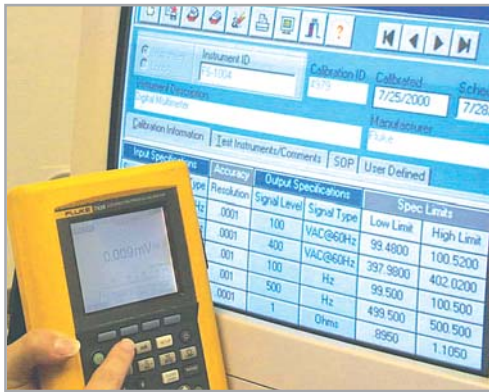


Prime Technologies, Inc. ProCal V5 Calibration Management Software

Go Paperless!

ProCal V5 ProCal V5 can be used with popular Documenting Process Calibrators from manufacturers such as Fluke, Transmation and Druck for a complete, seamless, paperless data management system. Direct entry of calibration data saves time and reduces the risk of error. When you team your DPC with ProCal V5, you will economically and easily:

Works with HART DPCs!



- Get Organized
- Eliminate Paperwork
- Increase Efficiency
- Improve Quality
- Stay Compliant



Supported Calibrators

- Druck DPI605/DPI615
- Druck/Unomat MCX II
- Fluke 743B
- Fluke 744
- Transmation 195
- Transmation 196

NOTE: Call Transcat for an updated list of supported calibrators

Validation

All versions of ProCal V5 are fully tested and internally validated to meet the needs of FDA-regulated users. IQ/OQ/PQ documentation is available to you in e-format. Prime Technologies operates and develops products using strict Quality Assurance procedures that comply with FDA and ISO requirements.

Turnkey Solutions Make Your Job Easier.

Prime Technologies, Inc. can provide the software, hardware and technical services to ensure that **your** calibration management program meets **your** particular set of circumstances:

- System Setup/Integration
- Data Entry
- Custom Programs
- Data Conversion
- Program Validation
- Enhancements/Upgrades
- Calibration Expertise/Service
- Training
- Complete 24-hour Technical Support

**Contact Transcat for a
FREE Demonstration CD!**

Scan and enter barcode data at remote workstation.

**Note: Find Access
Versions on TransCal V5
pages on A59-A60.**

Ordering Information

MPPC5S5	ProCal V5 MS SQL Server 5-User Network	
MPPC5S10	ProCal V5 MS SQL Server 10-User	
MPPC5S15	ProCal V5 MS SQL Server 11 - 15 Users	
	ProCal V5 MS SQL Server Over 15 Users	Call for quote
MPPC5O5	ProCal V5 Oracle 8i 5-User Network Version	Call for quote
MPPC5O10	ProCal V5 Oracle 8i 10-User Network Version	Call for quote
MPPC5O15	ProCal V5 Oracle 8i 15-User Network Version	Call for quote
	ProCal V5 Oracle 8i Over 15-User Version	Call for quote
(NOTE: all SQL Server and Oracle applications include validation scripts)		
Options		
MPPC5MM	ProCal V5 Access Version Maintenance Module	
MPPC5MW	ProCal V5 Maintenance Workorder (SQL/Oracle)	
MPDPCFL	DPC interface - Fluke 743B/744	
MPDPCTR	DPC interface - Transmation	
MPDPCDR	DPC interface - Druck DPI605/Unomat MCX II	
MPMOBW	Mobile workstation	
MPBAR	Bar code/scan utility	
MPPC5TRAIN	Training (On-site, 2 days, per person) (Training cost does not include travel expenses)	
MPACCVAL	Access® Validation Package* (*Includes protocols for mobile work station & calibration interface)	Call for quote
MPCRY5	Crystal Reports® report-generating software	

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Calibration Instruments