



# Product Family Overview

## Introduction

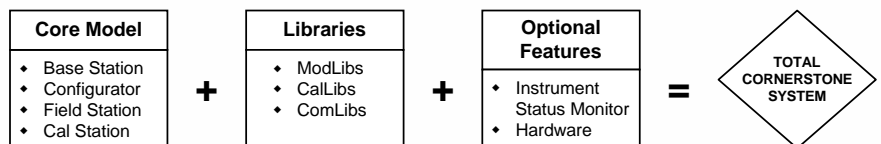
The Cornerstone family of software products is used worldwide to address a variety of application requirements. These include:

- Calibration management for smart and conventional instruments
- Safety and quality audit compliance
- Direct configuration of smart devices
- On-line maintenance station in support of control system solutions

This overview presents a general description that will assist you in selecting the appropriate Cornerstone components for your application. Individual brochures and data sheets contain the itemized definition for each Cornerstone product and option.

## Product Architecture

The Cornerstone software family architecture allows you to assemble your instrument maintenance system to meet your application requirements. Each system is based on a Cornerstone "core" product. The core products are enhanced by adding optional libraries and software components that provide special features. Not all options work with all core products, but every option requires a core product. The Cornerstone Product Price List contains the complete definition of prerequisites, compatibility, pricing and availability for core products and options.



## Core Software Products

Cornerstone Base Station is the most comprehensive collection of Cornerstone features, and is the platform on which the greatest number of Cornerstone options may be concurrently installed. Cornerstone Base Station contains all of the integral functions and data base structures required to support the entire spectrum of record keeping and communication alternatives that provide calibration, history, reporting, data base management, docking management of intelligent calibrators, and other Cornerstone custom features, such as those that support smart instruments and their protocols.

Cornerstone Field Station is the subset of Base Station that accepts instrument configurations and test and calibration procedures downloaded from a master Base Station. Running on a portable computer, Field Station software is then used to perform instrument configurations, and manual or automated calibrations in the field, and to upload the results back into the master Base Station.

Cornerstone Configurator is the stand-alone core product that is dedicated to the configuration and status management of HART smart instruments. Configurator may be used as an enhanced, personal computer based replacement for handheld communicators in the lab or in the field. Like Base Station, Configurator may also be used with one or more of the Cornerstone Communication Interface Libraries (ComLibs) and with Instrument Status Monitor (ISM). In this usage, Configurator provides single maintenance station access to smart devices in the plant or field for configuration, diagnosis, status retrieval, and DDE access by other Windows applications. It offers a lower cost alternative to Base Station for HART configuration management applications that do not require calibration management, instrument history, or configuration change tracking.

Cornerstone Cal Station is the stand-alone core product that is dedicated to the test and calibration of all types of instruments. Cal Station handles smart instruments as conventional devices. That is, it does not have the direct "connection" capability to smart instruments that is present in Base Station, Field Station, and Configurator. As a stand-alone product without additional options, Cal Station provides an extensive set of scheduling, tracking and recording functions for managing instrument maintenance and calibration via printed calibration procedures and manual entry of calibration data. In concert with optional Cornerstone CalLibs, Cal Station provides a direct interface to intelligent "docking" calibrators. Through this interface, Cal Station accomplishes the download of user defined test procedures into the calibrator, and the subsequent upload of calibration results for automated archiving, display, reporting and export to other programs.

### **Communications Interface Libraries (ComLibs)**

*ComLibs* are the products within the Cornerstone family that make it possible for a Cornerstone core product to communicate with HART instruments over various forms of I/O hardware and industrial networks. ComLibs incorporate the functions most users associate with communications drivers and handlers. Standard ComLibs are included with Configurator, Base Station, and Field Station to interface a variety of single loop HART modems from third party manufacturers. Optional ComLibs are available for popular HART multiplexer equipment to implement a plant wide permanent on-line instrument maintenance system based on the Cornerstone core software.

### **Model Support Libraries (ModLibs)**

*ModLibs* are the optional libraries that understand how to talk to the various types and models of smart instruments supplied by different equipment vendors. ModLibs make it possible for a Cornerstone core product to read, process, display and modify the individualized parameters and functions in a specific model of smart instrument. For example, ModLibs implement customized support for the "transmitter specific" portion of the command set within the HART protocol. Note that ModLibs are not required for basic communication of common parameters. Generic HART communication is integral to each Cornerstone core model that supports the HART protocol.

### **Calibrator Interface Libraries (CalLibs)**

*CalLibs* are the optional products that provide intelligent interfaces to various models of calibration equipment. On-line CalLibs enable the Cornerstone core model to automate the performance of multi-point test and calibration. Docking CalLibs make it possible to download test criteria and to upload results from portable calibrators used in remote calibration activities. All CalLibs incorporate special logic to support custom parameter setup and data validation for the individual model of calibrator.

### **Optional Features**

Various additional options work in conjunction with Cornerstone core products and other options to provide extensions and enhancements. These feature enhancements include periodic status monitoring of plant instruments and automated instrument configuration tracking. Base Station and Cal Station may be extended with the addition of Multi-user kits for simultaneous operation of multiple user stations on a Local Area Network. Please check the Price List for the current set of available options.

