



ZOOM[®] SOFTWARE SUITE

VERSION 7.3

APPLICATION

- The ZOOM software suite offers a graphical user interface to collect and analyze data, manage alarms triggered from various acquisition units, display collected information in real-time graphics and tables, and communicate with external control systems (SCADA). Installed in a server-client configuration, the ZOOM software suite provides a wide set of tools for monitoring, analyzing, and understanding critical machine condition parameters.

MAIN NEW FEATURES

- New, patented rotor shape surveillance functionality, including alarms for early warning of rotor structural weaknesses.
- Addition of the ZOOM SFA acquisition service.
- Improved process for the selection of units, measuring points, and parameters prior to triggering manual measurements.
- Improved process for the management of archived measurements, with all measurements grouped by type in a new centralized List of Archived Measurements window.

SOFTWARE APPLICATIONS

The ZOOM software suite is composed of the following software applications:

ZOOM Server	To create new databases, manage existing ones, control communication between the various software and manage all measurement requests.
ZOOM Configuration	Used to describe equipment configurations within the monitoring system, set alarms and event thresholds, as well as set the intervals on which automatic measurements will be taken.
ZOOM Application	Offers a variety of tools and features used for taking manual measurements, acknowledge alarms, display results, and monitor equipment status.
ZOOM Server Status	Used to monitor and annunciate the status of the ZOOM software suite at the server level.
ZOOM Update	Used to update databases and configurations to new versions as well as updating hardware firmware remotely or by USB key.



OPTIONAL ACQUISITION SERVICES

The ZOOM software applications may be complemented by services dedicated towards data acquisition equipment. These acquisition services operate continuously in the background.

ZOOM ZPU5000	Used for fast data acquisition, machine protection, and advanced data analysis. Related equipment: ZPU™-5000 acquisition unit (sold separately).
ZOOM ThermaWatch® Stator	Used to monitor trends and alarms for stator temperature. Related equipment: HAVSM™ for TWS™ sensors (sold separately).
ZOOM Look	Used to monitor trends and alarms for slow-evolving parameters. Related equipment: PCU-100, STATE™-100 / 200 (sold separately).
ZOOM PDA200	Adds the possibility to display, analyze, and trigger alarms on the partial discharge phenomenon. Related equipment: PDA-200™ (sold separately).
ZOOM SFA	Adds the possibility to display, analyze, and trigger alarms on inter-turn short-circuits for turbo-electric generators. Related equipment: SFA-200™ (sold separately).
ZOOM SM200	Adds the possibility to display, analyze, and trigger alarms on shaft current and voltage for turbo-electric generators. Related equipment: SM-200™ (sold separately).

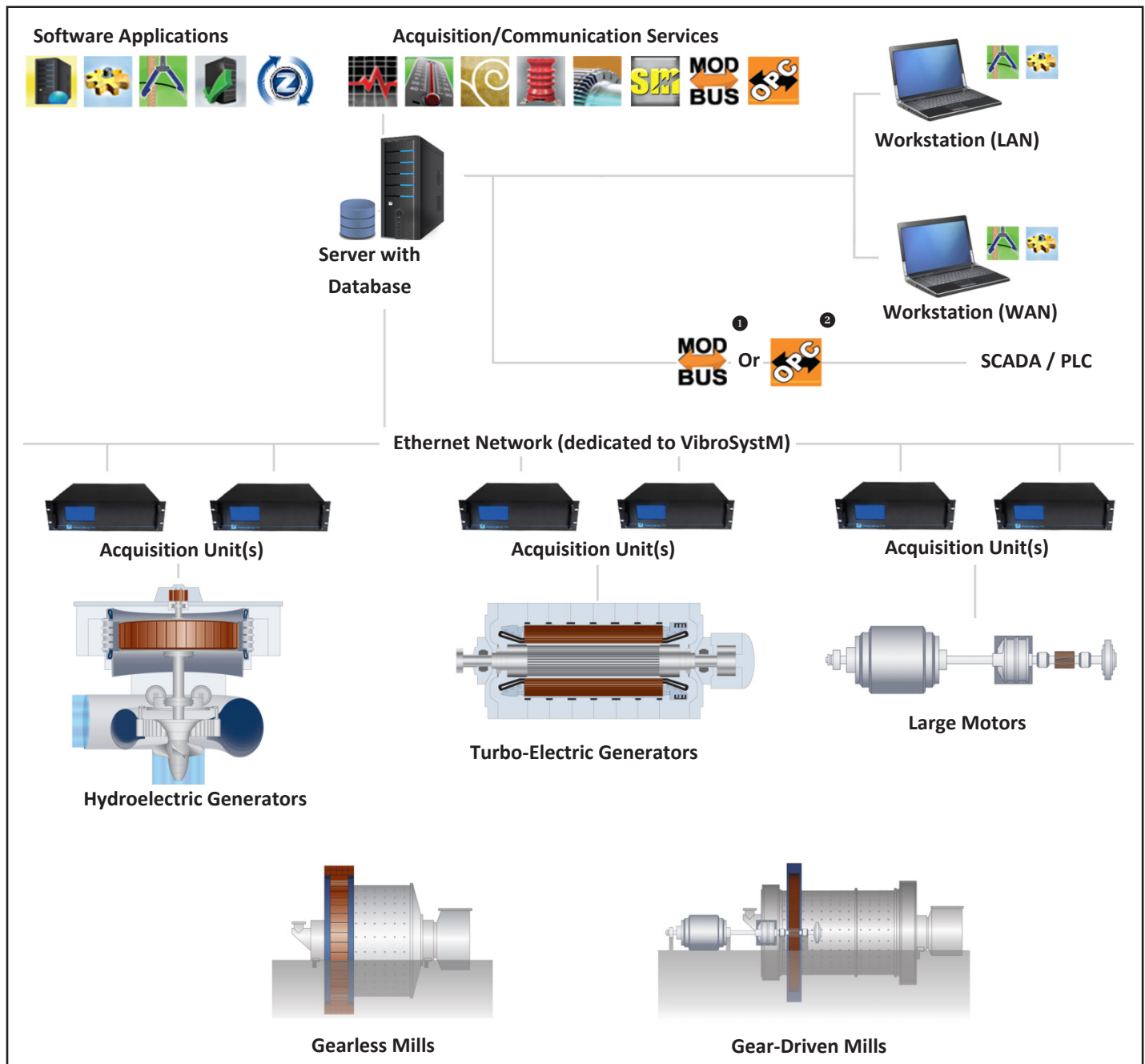
OPTIONAL COMMUNICATION SERVICES

The ZOOM software applications may also be complemented by services that act as gateways and that allow the ZOOM software to connect with external control systems. These communication services operate continuously in the background.

ZOOM Modbus	A bi-directional communication gateway that collects data from the plant's control system while making ZOOM "trending" data available. Communication protocol: Modbus® RTU or TCP.
ZOOM OPC	A bi-directional communication gateway that collects data and alarm messages from the plant's control system while making ZOOM "trending" data, alarms, and events available. Communication protocol: OPC® DA 2.05a and OPC AE 1.10 over Ethernet.



SYSTEM OVERVIEW



① Trends are shared between the server and ZPU-5000 through the Modbus and OPC communication protocols.

② Various equipment are available for covering specific functions. Currently available equipment are: ZPU-5000, SFA-200, PDA-200, SM-200, HAVSM for TWS sensors, and STATE -200.



HARDWARE REQUIREMENTS

For a Server

Operating System	Recommended Database Engine	Recommended Hardware
Windows Server® 2003	<ul style="list-style-type: none"> Microsoft® SQL Server® 2008 standard and R2. Also supported: SyBase® 8. 	<ul style="list-style-type: none"> Server type computer. 2 GHz or faster, multi-core processor. Minimum 4 GB of system memory. DVD burner. Dual Ethernet network card for LAN/WAN settings. SVGA at 1280x1024, 32-bit color. 4 GB of free space on installation drive. Minimum 250 GB of free disk space for databases. 3 available USB ports.
Windows Server 2008 R2	<ul style="list-style-type: none"> Microsoft SQL Server 2008 standard and R2. Also supported: SyBase 8. 	<ul style="list-style-type: none"> Server type computer. 2 GHz or faster, 64-bit, multi-core processor. Minimum 4 GB of system memory. DVD burner. Dual Ethernet network card for LAN/WAN settings. SVGA at 1280x1024, 32-bit color. 4 GB of free space on installation drive. Minimum 250 GB of free disk space for databases. 3 available USB ports.
Windows Server 2012	<ul style="list-style-type: none"> Microsoft SQL Server 2014 standard. Microsoft SQL Server 2012 standard. Microsoft SQL Server 2008 standard and R2. Also supported: SyBase 8. 	<ul style="list-style-type: none"> Server type computer. 3.1 GHz or faster, 64-bit, multi-core processor. Minimum 8 GB of system memory. DVD burner. Dual Ethernet network card for LAN/WAN settings. SVGA at 1280x1024, 32-bit color. 4 GB of free space on installation drive. Minimum 250 GB of free disk space for databases. 3 available USB ports.

Not recommended: Windows XP Pro SP3® and Windows 7®

Not supported: Windows Vista® and Windows 8®

For a Workstation

Operating System	Recommended Hardware
<ul style="list-style-type: none"> Windows XP Pro SP3; Windows 7; Windows 8; Windows Vista (with limitations). 	<ul style="list-style-type: none"> 1 GHz or faster, multi-core processor; Minimum 2 GB of system memory; Ethernet network card; CD or DVD drive; SVGA at 1280x1024, 32-bit color; Minimum 2 GB of free disk space on the installation drive.

AVAILABLE LANGUAGES

English, French, Russian, Spanish, Portuguese, Mandarin Chinese

The online help may display the text for newer features in English only.



PRODUCT IDENTIFICATION

Product Number	Description
VSM-Z73-□□	ZOOM 7.3 Software Suite by ftp (92SP-ZMPE1-73)
VSM-Z73-□□ c	ZOOM 7.3 Software Suite on compact disk(92SP-ZMPK1-73)



Optional acquisition and communication service module(s) included:

- D = ZOOM SM200
- F = ZOOM SFA
- L = ZOOM Look
- M = ZOOM Modbus
- O = ZOOM OPC
- P = ZOOM PDA200
- T = ZOOM ThermaWatch Stator
- Z = ZOOM ZPU5000

Examples:

- VSM-Z73-ZFT2C:** ZOOM 7.3 Software Suite on compact disk, includes ZOOM 7.3 software applications (ZOOM Application, ZOOM Configuration, ZOOM Server, ZOOM Server Status, and ZOOM Update), ZOOM ZPU5000, ZOOM SFA, ZOOM ThermaWatch Stator, and 2 licenses.
- VSM-Z73-ZD1:** ZOOM 7.3 Software Suite by ftp, includes ZOOM 7.3 software applications (ZOOM Application, ZOOM Configuration, ZOOM Server, ZOOM Server Status, and ZOOM Update), ZOOM ZPU5000, ZOOM SM200, and 1 license.