



ZOOM[®] SOFTWARE SUITE

Version 7.1

The ZOOM[®] Software Suite is comprised of ZOOM[®] Platform and a wide variety of optional modules available individually based on required functionalities.





Available languages

- English
- French
- Russian*
- Spanish
- Portuguese
- Mandarin Chinese*

Designations are only available in English.

ZOOM[®] Platform






ZOOM[®] Platform is composed of the following software applications:

Software	Description
ZOOM [®] Server 	Windows Service to create new databases, manage existing databases, control communication between the various applications, and manage all measurement requests.
ZOOM [®] Configuration 	A graphical user interface used to describe equipment configuration within the ZOOM [®] system, set alarms and event thresholds, as well as set the intervals on which automatic measurements will be taken.
ZOOM [®] Application 	A graphical user interface that offers various tools and graphic features for taking manual measurements, acknowledge alarms, display results, and monitor equipment status.
ZOOM [®] Server Status 	Windows Service to monitor and announce the status of the ZOOM [®] Software Suite at Controller level.

Available Software Packages

Data Acquisition Software Packages



ZOOM[®] Platform is complemented by acquisition modules dedicated to data acquisition equipment use and configuration. The following table lists the available acquisition modules:

Module	Description	Equipment**
ZOOM [®] ZPU5000 [™] 	A software package used for fast data acquisition, protection, advanced data analysis and diagnostic.	ZPU [™] -5000
ZOOM [®] ThermaWatch [®] Stator 	For trending and alarming of the stator temperature.	HAVSM for TWS [™] sensors
ZOOM [®] Look 	To monitor trends and alarms for slow evolving parameters.	STATE [™] -100, PCU [™] -100, STATE [™] -200 and STATE [™] -300
ZOOM [®] PDA200 	Adds partial discharge analysis and display functionalities to ZOOM [®] Platform.	PDA-200
ZOOM [®] SFA100 	Adds stray flux analysis and display functionalities to ZOOM [®] Platform for turboelectric generators.	SFA-100

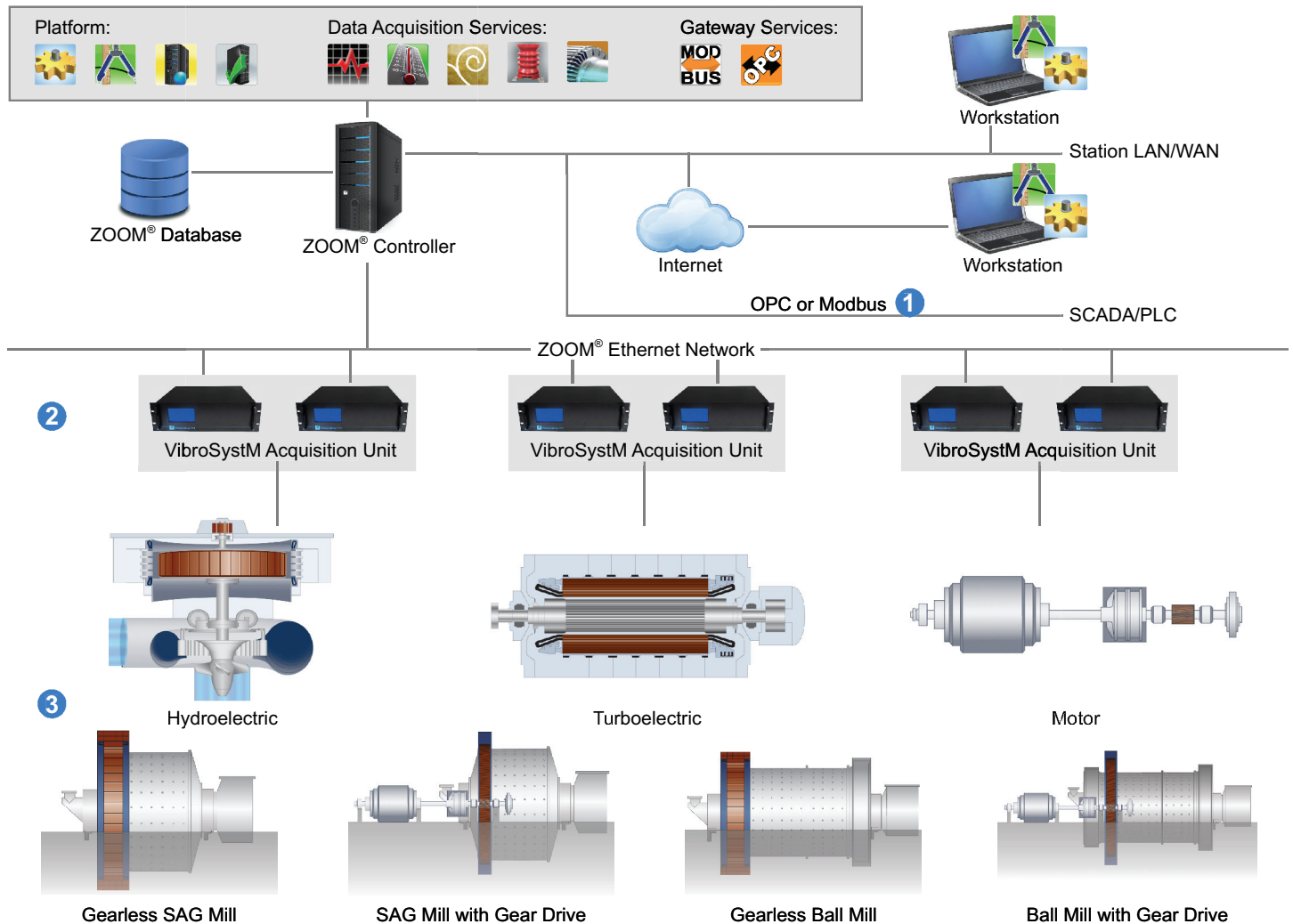


Gateway Software Package

ZOOM[®] Platform may be complemented by gateway modules, providing connectivity between the ZOOM[®] system and an external control system (ex.: SCADA)

Software package	Description	Protocol
ZOOM [®] Modbus 	A bi-directional communication gateway that collects data from the plant's control system while making ZOOM [®] trending data available to it.	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, ZOOM [®] Alarm and events available to it.	OPC DA 2.05 a and OPC AE 1.10 over Ethernet

Overview



- 1 Trends are available from the Controller or ZPU[™]-5000 via Modbus protocol-based communication. The Controller can use an Ethernet or an RS-485 link, while the ZPU[™]-5000 communicates through an RS-485 link.
- 2 Various equipment components are available for covering specific functionalities. Currently available equipment includes: ZPU[™]-5000, SFA-100, PDA-200, HAVSM for TWS[™] sensors, STATE[™]-200, and STATE[™]-300.
- 3 ZOOM[®] is available for hydroelectric units, turboelectric generators, wind turbines, large reversible pump storage units, large rotating mills, and mining machinery.



Computer requirements for ZOOM[®] Controller: Recommended configurations

OS	Database Management Systems	Recommended Hardware
Windows Server 2003	Recommended: • Microsoft SQL Server 2008 Standard, 10 CAL Also supported: • Sybase 8	<ul style="list-style-type: none"> • Server type computer • Processor: 2 GHz or faster multi-core • 4 GB of RAM • DVD burner • Dual Ethernet network card for LAN/WAN settings • SVGA at 1280 x 1024, 32-bit color • 4 GB of free disk space on the installation drive • 250 GB or more of free disk space for databases
Windows Server 2008 R2	Recommended: • Microsoft SQL Server 2008 Standard, 10 CAL • Microsoft SQL Server 2012 Standard, 10 CAL Also supported: • Sybase 8	<ul style="list-style-type: none"> • Server type computer • Processor: 2 GHz (64-bit processor) or faster multi-core • 4 GB of RAM • DVD burner • Dual Ethernet network card for LAN/WAN settings • SVGA at 1280 x 1024, 32-bit color • 4 GB of free disk space on the installation drive • 250 GB or more of free disk space for databases
Windows Server 2012	Recommended: • Microsoft SQL Server 2008 Standard, 10 CAL • Microsoft SQL Server 2012 Standard, 10 CAL Also supported: • Sybase 8	<ul style="list-style-type: none"> • Server type computer • Processor: 3.1 GHz (64-bit processor) or faster multi-core • 8 GB of RAM or more • DVD burner • Dual Ethernet network card for LAN/WAN settings • SVGA at 1280 x 1024, 32-bit color • 4 GB of free disk space on the installation drive • 250 GB or more of free disk space for databases

- Not recommended: Windows XP Pro SP3, and Windows 7
- Not supported: Windows Vista and Windows 8 (ZOOM[®] Base is not compliant)

Computer requirements for ZOOM[®] Workstation:

Recommended Hardware

- Processor: 1GHz or faster multi-core
- 2 GB of RAM or more
- Ethernet network card for LAN/WAN settings
- CD or DVD drive
- SVGA at 1280 x 1024, 32-bit color
- 2 GB of free disk space on the installation drive

Operating System requirements

- Windows XP Pro SP3, Windows 7, Windows 8
- Also available with limitations: Windows Vista