



ZOOM[®] SOFTWARE SUITE

Version 7.0

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



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 communications between the various applications, and manage all measurement requests.
ZOOM [®] Configuration	Graphical user interface to describe equipments configuration within the ZOOM [®] system, set alarms and events thresholds, and set the intervals on which automatic measurements will be taken.
ZOOM [®] Application	Graphical user interface offering various tools and graphic features to take manual measurements, acknowledge alarms, display results, and monitor equipments status.
ZOOM [®] Server Status	Windows Service to monitor and announce the status of the ZOOM [®] Software Suite at Controller level.

Available languages

The ZOOM[®] Software Suite is available in:

- English
- French
- Russian
- Spanish

However, all equipment designations are only available in English.

* Equipment Sold Separately.

Available Software Packages

Data Acquisition Software Packages

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

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



System requirements

Computer requirements for ZOOM[®] Controller:

- Recommended Hardware
- Server type computer
 - Processor: Intel Xeon, Quad-Core or Dual-Core
 - 4 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

- Operating System requirements
- Windows Server 2003 or 2008
 - Not recommended: Windows XP, Windows Vista, and Windows 7

- Recommended database engine:
- For Windows Server 2003: Microsoft SQL Server 2008 R2 Standard, 10 CAL
 - For Windows Server 2008: Microsoft SQL Server 2008 R2 Standard, 10 CAL or Microsoft SQL Server 2012 Standard, 10 CAL



Computer requirements for ZOOM[®] Workstation:

- Recommended Hardware
- Processor: Intel Dual-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

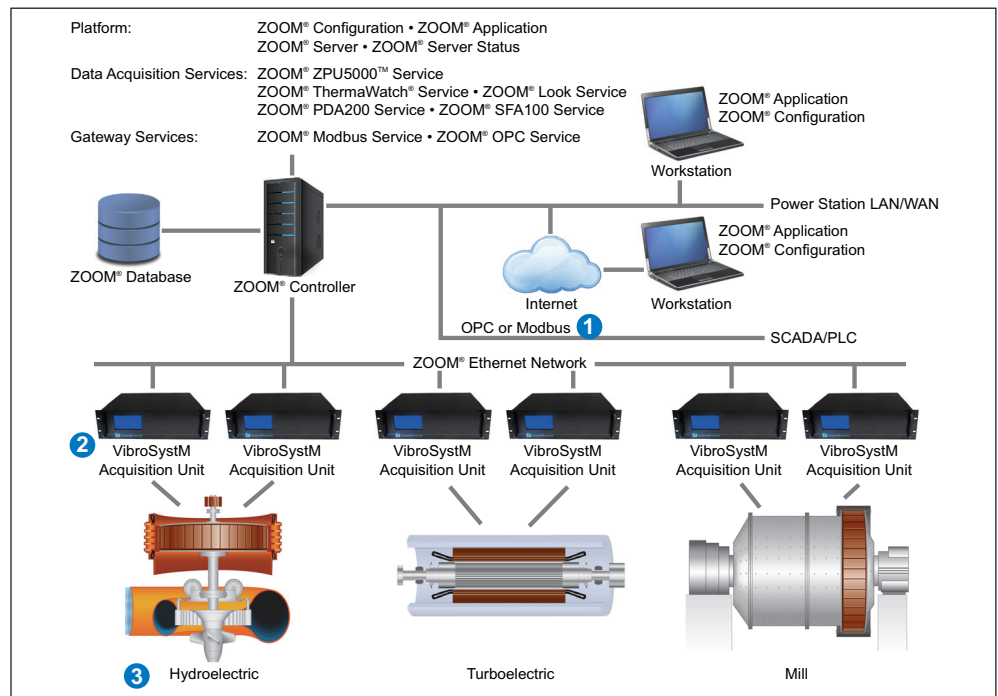
- Operating System requirements
- Windows XP Pro SP3, Windows 7
 - Also available with limitations: Windows Vista

Gateway Software Package

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

Software package	Description	Protocol
ZOOM [®] Modbus 	Bi-directional communication gateway between ZOOM [®] and plant control system/SCADA to collect data from the control system, and make ZOOM [®] trending data available to the control system.	Modbus RTU or TCP
ZOOM [®] OPC 	Bi-directional communication gateway between ZOOM [®] and plant control system/SCADA to collect data and alarm messages from the control system and make ZOOM [®] Trending data, ZOOM [®] Alarm and events available to control system.	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 Ethernet or an RS-485 link, while the ZPU[™]-5000 communicates through an RS-485 link.
- 2 Various equipment components are available for coverage of specific functionalities. Currently available equipment include: ZPU[™]-5000, SFA-100, PDA-200, HAVSM, and State[™]-200.
- 3 ZOOM[®] is available for hydroelectric units, turboelectric generators, wind turbines, large reversible pump storage units, and large rotating mills and mines machinery.