



ZOOM[®] SOFTWARE SUITE

Version 7.2






Installed on a server-type or desktop computer, the ZOOM software suite is the interface users need for understanding and solving problems related to machine condition. This user-friendly software suite incorporates a variety of software applications and services that help manage different parameters, connect with external control systems (SCADA) and, most importantly, communicate data with acquisition units.

Main New Features

- A single installation program for the entire software suite.
- ZOOM Update: a new software application for easily updating databases, configurations, and acquisition units.
- Feature allowing to monitor vibration and trigger alarms on five selected frequency bands.
- Exciter noise filter on air gap measurements.
- Broken gear tooth parameter for gear-driven mills.
- Configurable filters for maximum shaft displacement values (Smax).
- Pole shape-related ThermaWatch[®] Rotor sampling graph.
- ZOOM SM200: a new acquisition service for monitoring shaft current and voltage.
- Alarm triggering on partial discharge and interturn short circuit detection.

Software Applications







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

<p>ZOOM Server</p> 	<p>To create new databases, manage existing ones, control communication between the various software and manage all measurement requests.</p>
<p>ZOOM Configuration</p> 	<p>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.</p>
<p>ZOOM Application</p> 	<p>Offers a variety of tools and features used for taking manual measurements, acknowledge alarms, display results, and monitor equipment status.</p>
<p>ZOOM Server Status</p> 	<p>Used to monitor and annunciate the status of the ZOOM software suite at the server level.</p>
<p>ZOOM Update</p> 	<p>Used to update databases and configurations to new versions as well as updating hardware firmware remotely or by USB key.</p>





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.

<p>ZOOM ZPU5000</p> 	<p>Used for fast data acquisition, machine protection, and advanced data analysis. Related equipment: ZPU™-5000 acquisition unit (sold separately).</p>
<p>ZOOM ThermoWatch Stator</p> 	<p>Used to monitor trends and alarms for stator temperature. Related equipment: HAVSM™ for TWS™ sensors (sold separately).</p>
<p>ZOOM Look</p> 	<p>Used to monitor trends and alarms for slow-evolving parameters. Related equipment: PCU-100, STATE™ -100 / 200 (sold separately).</p>
<p>ZOOM PDA200</p> 	<p>Adds the possibility to display, analyze, and trigger alarms on the partial discharge phenomenon. Related equipment: PDA-200™ (sold separately).</p>
<p>ZOOM SFA100</p> 	<p>Adds the possibility to display, analyze, and trigger alarms on inter-turn short-circuits for turbo-electric generators. Related equipment: SFA-100™ (sold separately).</p>
<p>ZOOM SM200</p> 	<p>Adds the possibility to display, analyze, and trigger alarms on shaft current and voltage for turbo-electric generators. Related equipment: SM-200™ (sold separately).</p>

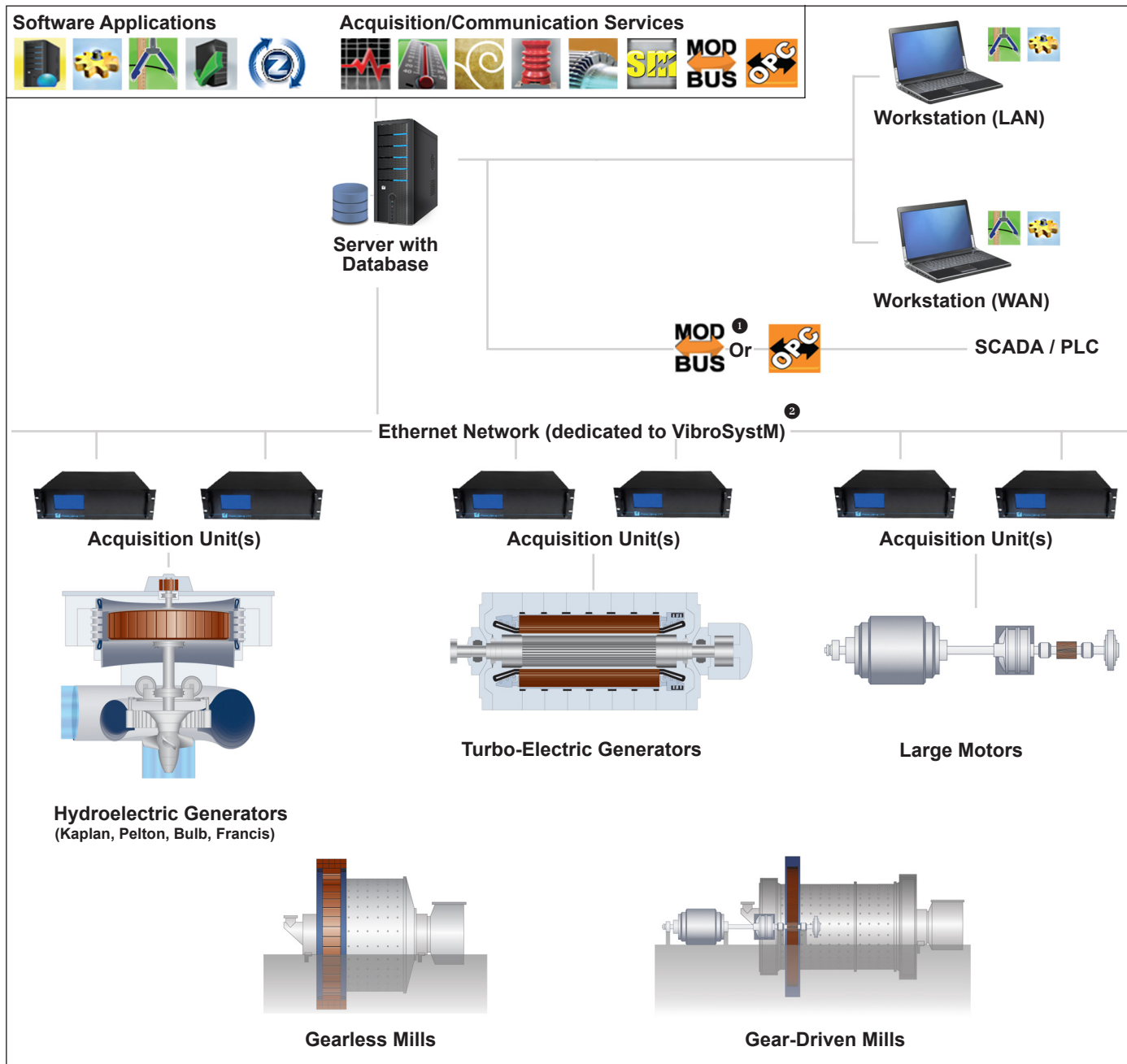
Optional Communication Services

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.

<p>ZOOM Modbus</p> 	<p>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.</p>
<p>ZOOM OPC</p> 	<p>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.</p>



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-100, 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 only displays the new features in English and French

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