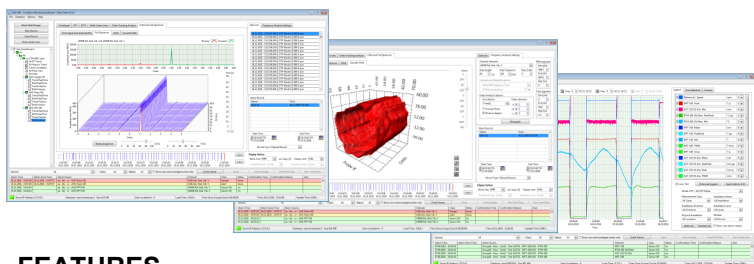




Orca CMS-500

Condition Monitoring Software



FEATURES

- Long term storage database based software
- Multi-instruments and multi-units data handling
- Full integration of PMx-300 and MMS-400 products family
- Long term trending and alarm log data storage
- Event based data storage and analysis
- Unit startup, overspeed and shutdown based data storage and analysis
- Many data visualization as:
 - Site and machines overview and bargraph
 - Time Signal, Pole Profile and Speed profile
 - Mingap, Flux and Temperature pole signature
 - FFT, STFT
 - Cascade and Waterfall (Order or frequency based)
 - Orbits (Unfiltered, filtered and super-imposed)
 - Cascade orbits and Full spectrum
 - Bode and Polar plots (Magnitude and phase)
 - Shaft center line
 - Airgap Polarview with Stator and Rotor roundness
 - Trend vs time and trend correlation

Monitoring solution



Endwinding monitoring



Air gap monitoring



Magnetic flux monitoring



Roller bearing monitoring



Axial thrust position



Shaft & bearing vibration

Related applications



Hydrogenerators



Pumps, fan, motors



Windturbines



Gearless millsdrives



Turbogenerators



Gas & steam turbines

DESCRIPTION

CMS-500 Orca is a powerful condition monitoring software designed for multiple plant and multiple machine monitoring. The system is built around the most advanced open source relational database PostgreSQL which given to ORCA system great features as long term trending and event with an excellent reliability.

PMx-300 and MMS-400 products are fully integrated to the CMS-500 Orca and can be used on the same PostgreSQL database at the same time. CMS-500 Orca includes two independent software package running as a client and server system.

- CMS-500 Data Server acquires data streamed from PMx-300 or MMS-4XX monitoring modules and stores them in the SQL database.
- CMS-500 Data Client is connected to the SQL database and allow to visualize the recorded data.

The connection between database and CMS-500 Orca is done by TCP/IP allowing to access the data remotely from different computers trough the LAN.

The software CMS-500 Data Client display the data structured by companies, sites, units and instruments. Available visualization and diagnostics functions are automatically defined by the configuration of the instruments. The system displays machine overview with actual vibration/gap parameters in the form of bargraph, trend data and raw data for analysis.

GLOBAL SPECIFICATION

ARCHITECTURE

Operating system	Windows 7 & 10 / Windows server 2012 and 2016
Client - Server architecture	Streaming from multiple modules via TCP/IP, client access via TCP/IP
Database	PostgreSQL
Min. system requirements (Depending the number of instruments)	4GB RAM, 300GB disk space, Intel Pentium i5 2GHz, display resolution: 1680x1050

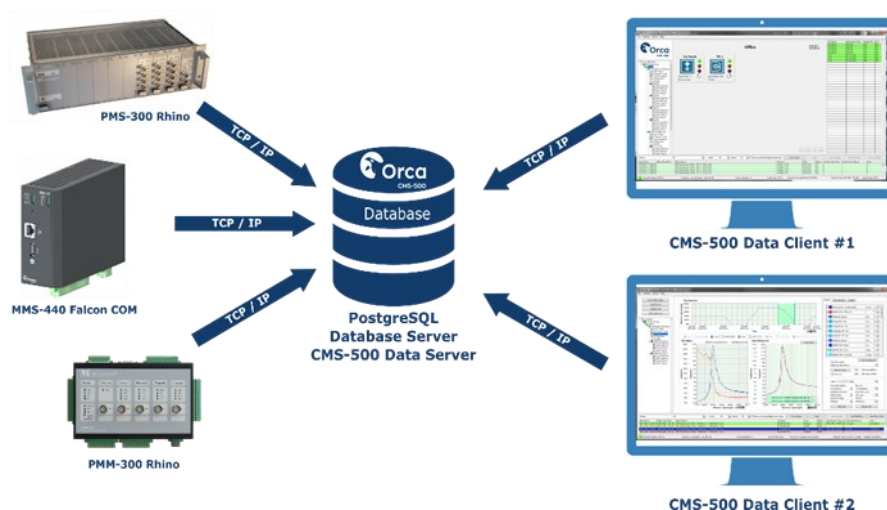
CMS-500 DATA SERVER

Max. number of modules	32
Real time data recording	
Raw data	- Continuous data recording: typically last 15min in circular memory - Discontinuous data recording: user selectable
Trending data	Continuous storage: every 5s, 1h in circular memory
Historical data recording	
Raw data	- Event recording (post triggered, on alarms) - On schedule (via CMS-500) - Machin startup and shutdown recording
Trending data	- Every 5 seconds last 2 years - Every 1 minute (MIN, MAX, AVG) last 2 years - Every 1 hour (MIN, MAX, AVG) unlimited - Every 1 day (MIN, MAX, AVG) unlimited

CMS-500 DATA CLIENT

Max. users	40 by default (can be changed in PsotgreSQL configuration)
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CMS-500 ORCA OVERVIEW



ORDERING INFORMATION

Part type CMS-500
Ordering code 21.500.000
Condition Monitoring Software



CMS-500 Data Client



CMS-500 Data Server Configurator

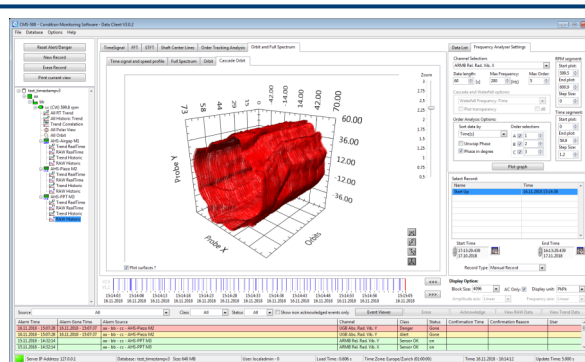


CMS-500 Data Server

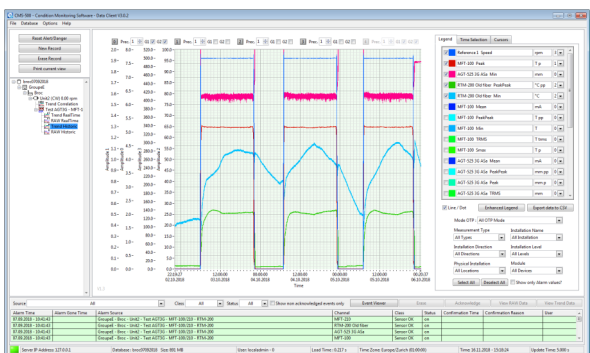
SCREENSHOTS



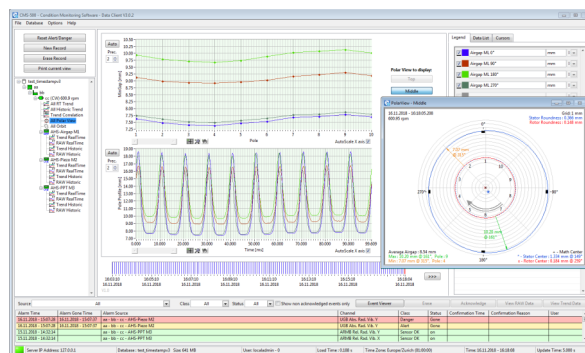
Full Spectrum



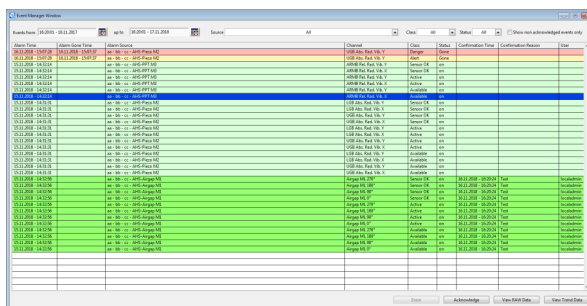
Cascade Orbits



Trend Historical



Airgap



Events logger

MC-monitoring Quality certifications



LOCAL REPRESENTATIVE

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