Trend and Historian



In this section...

Storage and Replication

Store and Forward

Universal Time and Daylight Saving

These features, as described for the Alarm and Events, are also available for the Tag Historian database management.

Process Analysis and Batch Systems

Compare two curves on the same chart from two different start times, ideal for batch and process analysis.

Vertical and XY plots

Vertical waterfall and XY charts are available, with all properties accessible through real-time tags or in the code behind scripts.

Annotations and Alarms Overlay

Customizable open project templates are provided, so you can overlay annotations stored in SQL databases, or alarm conditions and acknowledgement, on top of the trend charts.

Real-time Online Charts

Online charts run at the client display level, even if there is no historian to the selected tags. Built-in trend chart control is available for desktop, web and mobile clients.



Combine Historian curves with any SQL database queries.

Customize and Save at Runtime

Empower operators to customize tag groups, scales and the whole appearance of the trend charts at runtime; save and share the configuration.

Snapshots, Tables and Reports

Trend charts can be added to web and PDF reports, image snapshots and value data table exports are available upon operator commands or any process event.

OSIsoftTM PI System Database

For high-performance, large applications, instead of a SQL database, the tag historian can be kept on the PI System database. The pure .NET SDK level connection with PI (no COM, OPC or OLEDB required) provides high performance and click-once tag definition synchronization.

Data Quality and Timestamp

Tag Quality is stored and presented on the trend charts. FactoryStudio is capable of handling up to 0.1 ms interval timestamps, therefore, the precision will be whatever the evolution of networks and data acquisition devices will bring in the future. Your data management based on FactoryStudio is prepared for long-term usage and process enhancements.



Real-time SPC calculation.