

# PEERFactory® RPM

## Real-time Performance Monitoring

Advanced manufacturers are in a constant race to increase profits by reducing costs and improving throughput. This race is often hampered by a poor understanding of how the manufacturing process is performing. With correct and timely information, managers can make real-time decisions that will have a positive impact on a company's bottom line.

### The Challenge

On a daily basis, the manufacturing shop floor of an advanced manufacturer produces a wealth of information that can be used to measure performance, improve processes, and give early warning to pending issues. Tapping into this information reliably is a hurdle that most advanced manufacturers struggle to overcome. Often, partially implemented IT systems and manual data collection procedures are implemented to solve a specific problem. However, over time, the discipline to maintain these systems and procedures breaks down and is abandoned. To complicate matters, shop floor automation is collecting valuable data at the machine controls level, but the data is difficult to access due to a wide variety of data formats and communication protocols.

### The Solution

PEERFactory Real-time Performance Monitoring (RPM) is a flexible, robust, and scalable system that provides insight into the Overall Equipment Effectiveness (OEE) of manufacturing processes.

Built upon PEER Group's proven PEERFactory Data Management Framework (DMF™), RPM is a solution that is readily rolled out to the shop floor under conditions that would prevent most data collection systems from being implemented. RPM is able to collect data from a wide variety of data sources, such as OPC, SECS/GEM, flat file, databases, XML, and specific device communication drivers.

Time and time again, it is the flexibility of RPM that proves to be its greatest strength. Other available data collection tools only support one standard interface and are targeted for a specific industry. At PEER Group, we combine our experience in the electronics, semiconductor, solar, healthcare, and automotive industries to bring to market a convergence of the best practices from these different industries, who all strive to improve the performance of their manufacturing processes.

PEERFactory RPM allows you to:

- ▶ Collect data from multiple data sources via multiple protocols
- ▶ Support high data collection rates (150,000 points per second)
- ▶ Merge context data prior to storage
- ▶ Support Microsoft® SQL Server®, Oracle®, and hybrid data models
- ▶ Perform historical data mining
- ▶ View performance dashboards that are accessible in the plant and on mobile handheld devices

PEERFactory RPM is ready for deployment and can help you understand cycle time imbalances and collect equipment downtime statistics.

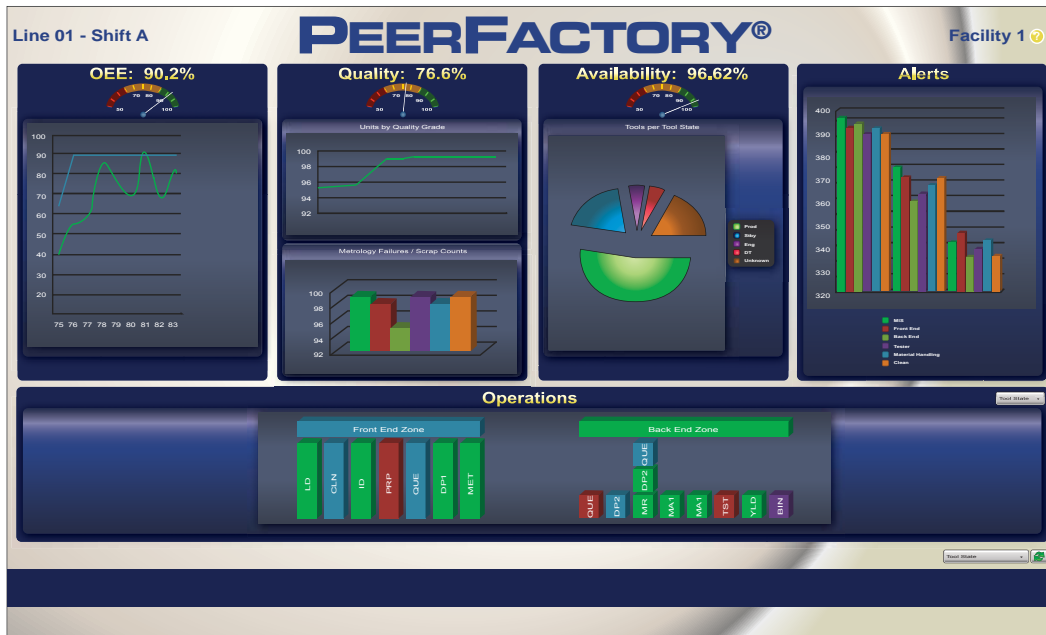
This data can be interfaced directly into your Maintenance Management System to avoid manual data collection errors.

Its quick reference dashboard lets managers immediately view shop floor performance data. It provides a platform to launch corrective action or allow for more in-depth analysis by process engineers and quality professionals.

The reporting dashboards are tailored to your specific needs and provide visibility into the Key Performance Indicators (KPIs) that matter to you.



Quick Reference Dashboard via Handheld Device



Management Performance Dashboard

PEERFactory RPM is built to thrive in a manufacturing environment:

- ▶ Supports handshaking protocols with automation controls to ensure data integrity and prevent data loss
- ▶ Provides notifications of connection interruption via a built-in communications watchdog
- ▶ Supports flexible parsing of flat file and XML data sets
- ▶ Collects system parameters, such as CPU usage and memory performance
- ▶ Allows other systems to subscribe to RPM data flows via a Winservice API and provides subscription intelligence for multiple consumers of the same data

## RPM Highlights

FEATURES	BENEFITS
<i>Data collection</i>	<ul style="list-style-type: none"><li>▶ Fast, reliable, and flexible data collection</li><li>▶ Ease of configuration</li><li>▶ Supports multiple data source protocols</li><li>▶ Merge context data</li></ul>
<i>Comprehensive data analysis</i>	<ul style="list-style-type: none"><li>▶ View both historical and real-time data</li><li>▶ Reporting dashboards provide visual cues to manufacturing process health and performance</li><li>▶ Integrates with Microsoft SharePoint® for report distribution and collaboration</li><li>▶ Provides reporting analysis on historical data</li></ul>
<i>Integration with other systems</i>	<ul style="list-style-type: none"><li>▶ Supports both Microsoft SQL Server and Oracle databases</li><li>▶ Provides and services base API for integration with other systems</li></ul>
<i>Low cost of ownership</i>	<ul style="list-style-type: none"><li>▶ Allows end-user configuration of data collection</li><li>▶ Provides data management capabilities</li><li>▶ Provides system logging for diagnostics and troubleshooting</li><li>▶ Track the true cost of maintenance</li></ul>

### About PEERFactory

PEER Group's PEERFactory is a toolkit of comprehensive integrated software modules that provides tailored, high-performance manufacturing operation solutions proven to meet specific customer needs for plant visibility, data collection, and line monitoring and control. PEERFactory combines the strengths of both enterprise and SCADA/HMI MES products while minimizing associated risks and costs. PEERFactory's Data Collection, MES, Asset Management, and APC modules feature high-performance storage and retrieval, flexible and scalable deployment, interoperability, and visualization.

### About PEER Group

PEER Group provides innovative factory automation software solutions and consulting services to the semiconductor, photovoltaic, and electronics industries. The world's best manufacturing companies turn to PEER Group to solve their most challenging equipment automation, data management, and process control problems. With more than 100,000 licenses shipped, we are the world's leading supplier of equipment connectivity and testing products to automated factories around the globe. Our innovative and reliable products and services help lower the cost of automation for high-volume manufacturers and their equipment suppliers.

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