

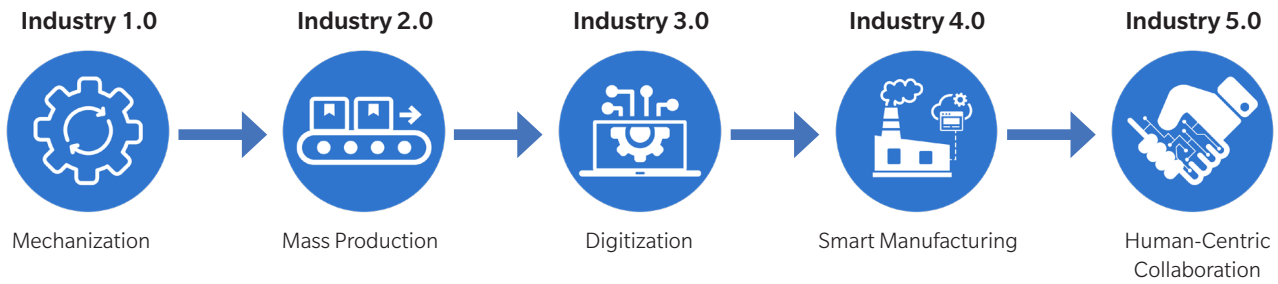


KONICA MINOLTA

Color and Light Measurement Solutions for Automation



The Evolution of Industry: From Mechanization to Digitization



Industry 5.0 represents the next phase of industrial evolution, emphasizing collaboration between humans and machines and personalized production. As market demand shifts towards greater customization, businesses are adopting advanced technologies like artificial intelligence (AI) and collaborative robots (cobots) to enhance precision and empower human creativity. Industry 5.0 aims to create a dynamic and interconnected manufacturing ecosystem that combines the innovative capabilities of humans and the efficiency of automation to achieve a more sustainable and efficient production process.

Benefit of Automation



Increased Productivity:

Automation can operate continuously without breaks, leading to higher output and faster production rates.



Cost Efficiency:

By reducing the need for manual labor and minimizing errors, automation can lead to significant cost savings in the long run.



Scalability:

Automated systems can be easily scaled to handle higher volumes as needed, making them ideal for growing businesses.



Consistency and Accuracy:

Automated systems reduce human error, ensuring tasks are completed with a higher degree of precision and consistency.



Time Saving:

Automation speeds up processes, allowing businesses to complete tasks much faster than manual methods.



Improved Safety:

In industries with hazardous environments, automation reduces the need for human workers to perform dangerous tasks.

Value Creation

The core philosophy driving the Konica Minolta Sensing brand is the creation of new value for our customers through performance, quality, knowledge, and service. This commitment is what positions us as a technological leader in color and light measurement solutions among the world's premier brands. With a proven track record of assisting thousands of customers globally, Konica Minolta Sensing is dedicated to helping organizations achieve their product quality and operational objectives.



Konica Minolta's expertise in optical precision technology is evident in its diverse solutions for color and light measurement, which have been successfully applied across various industries.



Instrument Systems is a global leader in manufacturing high-precision spectroradiometers and advanced light measurement systems for LED, SSL, and display characterization.



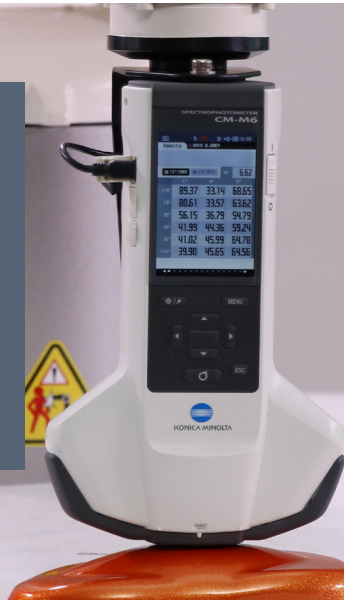
SPECIM is at the forefront of the industrial spectral camera market, offering hyperspectral imaging solutions that meet the increasing demand for advanced industrial machine vision applications.



Global leaders in lighting and display technology turn to Radiant Vision Systems for their test and measurement solutions.

Automated Color and Light Measurement

In today's visually-driven world, accurate color, display, and light measurement are crucial across various industries. The ability to quantify and manage these elements directly impacts product quality, customer satisfaction, and brand consistency. Color measurement ensures that products appear as intended, while display and light measurement guarantees that screens reproduce colors accurately, enhancing user experience. Together, these measurements empower businesses to maintain standards, improve quality control, and ultimately deliver exceptional customer experiences.



Real-Time Monitoring

Automated systems can continuously measure color and light properties, providing real-time data for immediate adjustments, enhancing product quality.

Improved Accuracy

Automated color and light measurement systems eliminate subjective judgment, ensuring precise and consistent results.

Cost Reduction

With fewer errors and less manual intervention, companies can save on labor costs and minimize waste or rework due to inaccurate measurements.

Increased Efficiency

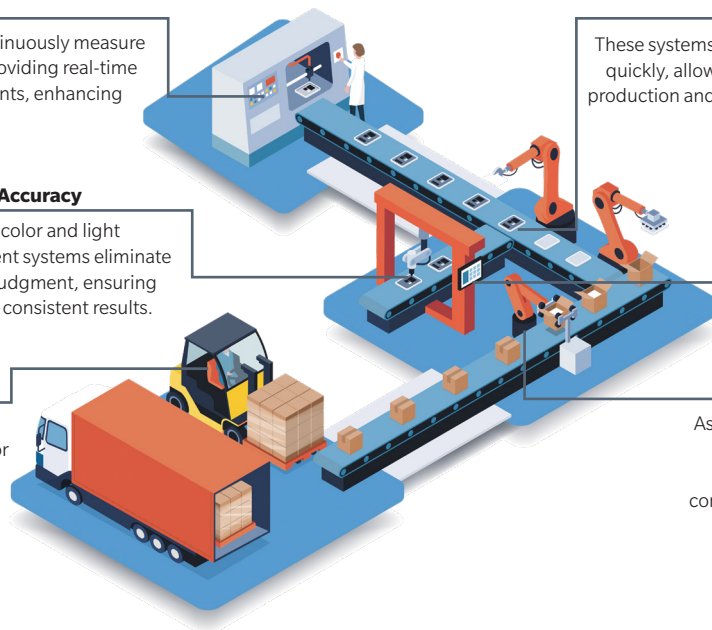
These systems perform measurements quickly, allowing for high-throughput production and reducing bottlenecks in quality control.

Enhanced Data Management

These systems can automatically collect, store, and analyze measurement data, improving traceability, compliance, and decision-making.

Scalability

As demand increases, automated systems can easily scale to handle more samples without compromising accuracy or speed.



Color

Mounted on Robotic Arm



Multi-Angle Spectrophotometer CM-M6



Spectrophotometer CM-17d / CM-16d



Chroma Meter CR-410 / CR-400

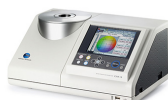
Samples Transferred to the Instrument via Robotic Arm



Spectrophotometer CM-3700A



Spectrophotometer CM-36dG



Spectrophotometer CM-M5



Spectrophotometer CM-26dG



Spectrophotometer CM-25cG

Display and Light

Mounted on Robotic Arm



Display Color Analyzer CA-527



Spectroradiometer CS-3000HDR / CS-3000 / CS-2000Plus



2D Color Analyzer CA-2500



Spectroradiometer CS-2000A / CS-2000



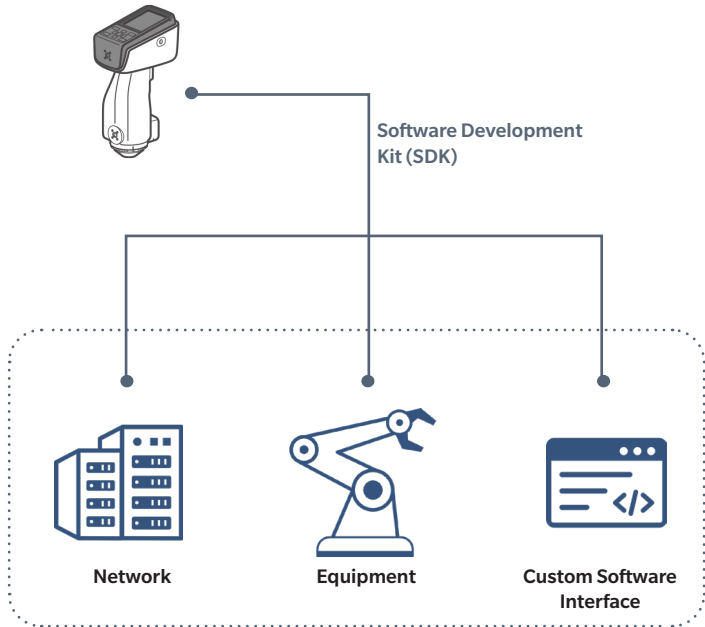
Color and Luminance Meter CS-200



ProMetric I-Series Imaging Colorimeter / Y-Series Imaging Photometer

Custom Software and Programming

Empower your factory with fully customized solutions that seamlessly integrate color and light measurement instruments into your facility's network and equipment. Our tailored approach includes hardware integration and custom software interfaces designed to synchronize with your operations, ensuring smooth communication and real-time control and ultimately elevating efficiency and performance to meet your exact specifications.



Applications

Automotive

- Vehicle exterior paints and coatings
- Vehicle interior parts like plastics, textiles, etc.
- In-vehicle display
- Illuminated controls/indicators
- Vehicle interior and exterior lighting

Electronic Devices

- Exterior color and appearance
- Device LCDs, LEDs, OLEDs, etc. display
- Illuminated buttons/indicators backlit symbols and characters

Food

- Color quality control of food
- Color quality control of packaging

Plastics

- Color quality control of molded plastics

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