

Real Time Laser Monitoring Synrad Lasers For Industry 4.0

Constructing smart manufacturing platforms networked to analytical information systems to ensure optimum operating efficiency is central to Industry 4.0. It starts with capturing real-time performance data of key components within an industrial processing system, then adding technological expertise to transform the data into operational information that yields higher productivity and cost reduction. Industry 4.0 is strongly focused on efficiency improvements and reducing downtime, planned or unplanned.



Real-time production data coupled with advanced analytics that improve operational efficiencies leading to essential cost saving measures for industrial processing operations. Critical components and sub-systems of modern processing equipment are made intelligent by communicating key operating parameters to ensure optimal performance and provide advanced warnings to avoid unplanned shut downs. Operators can change operational economics by making critical components and sub-systems easy to monitor.

Synrad p250, p400, i401, and f201 mid-power CO₂ lasers are equipped with real-time performance monitoring capability. As critical components of modern laser-based processing systems, the advanced analytic of opportunity for those ready to take the next step.

Contact Us

Americas

Synrad
4600 Campus Place, Mukilteo, WA
98275
P (425) 349.3500
F (425) 349.3667
synrad@synrad.com

Europe, Middle East, Africa

Novanta Europe GmbH
Division Synrad Europe
Parkring 57-59, D-85748, Garching, Germany
P +49 (0)89 31707 0
F +49 (0)89 31707 222
sales-europe@synrad.com

Asia

Synrad China Sales and Service Center
2401-J, Bak Building, Hi-tech Park
Nanshan District, Guangdong, PRC 518057
P +86 (755) 8280 5395
F +86 (755) 8672 1125
sales-china@synrad.com

SYNRAD
A Novanta Company

features are hard to resist. Real-time voltage, current, and temperature are available via a web based protocol system that easily connects with automated tracking systems. Monitoring key operational parameters of the laser(s) improves efficiency and productivity, and in advanced automated systems can trigger autonomous actions.

As experts in high performance CO₂ lasers, Synrad provides detailed information about specific operational parameters that impact the laser's intended application. Monitoring these key performance metrics can help determine tolerance boundaries to ensure output performance.

In addition to improving efficiency, productivity, and safety, advanced analytics yield better return on investment by avoiding unplanned downtime and ensuring optimum performance over the life of the laser. In the wider economy, advanced laser analytics open opportunities for business expansion into preventive maintenance programming for industrial processing systems. Industry 4.0 is opening doors



The high performance i401 is the only 400 W continuous wave (CW) CO₂ laser available, and is equipped with real-time performance monitoring capability to eliminate unplanned downtimes and maximize production output. Engineered for high speed processing, the i401 excels at cutting, perforating, and scoring applications for the flexible packaging and converting industries. Exceptional beam quality, excellent power stability, and real-time performance monitoring make the i401 the leading choice for high speed digital processing applications.