

Process infrastructure readiness assessment for inline Raman spectroscopy

Is your facility ready to integrate an inline analytical monitoring system without major modifications?

Before implementing an inline analytical monitoring solution, several technical considerations should be evaluated. This assessment helps determine, in just five minutes, what aspects of deployment are likely to be straightforward and which may require additional planning.

Checklist	Yes	No
Can your process control system easily integrate new instruments using standard communication protocols such as OPC UA?	☐	☐
If you added a new analytical measurement point tomorrow, would the operators readily see and use the data within your control system?	☐	☐
Do operators have access to real-time analytical data within their normal workflow (i.e., no need to consult a separate interface)?	☐	☐
Are the areas where you wish to add inline technology readily accessible (no specific challenges such as extreme temperature, vibration, hazardous solvents, or difficult access)?	☐	☐
Have you previously deployed an inline analytical instrument on your manufacturing process?	☐	☐
If an analytical instrument fails, do you have a business continuity strategy that allows production to continue without compromising process control?	☐	☐
Are analytical results automatically logged and time-stamped (i.e., they do not require manual entry)?	☐	☐
Does your technical team have experience working with inline spectroscopic analyzers?	☐	☐
If your facility includes hazardous environments or solvent-containing areas requiring certified instrumentation, do you have experience managing these requirements?	☐	☐
Have you already identified the process variables you want to monitor, such as conversion rate, crystal form, or solvent concentration?	☐	☐

How to interpret your score

8–10 Yes answers – Your infrastructure is ready. An inline Raman deployment is likely to be straightforward and efficient. Let's discuss your specific configuration.

5–7 Yes answers – Some considerations remain. A 30-minute technical discussion could help identify them and estimate the actual deployment effort.

0–4 Yes answers – A more structured implementation approach will be required. Deployment remains entirely feasible, but it's better to understand the requirements upfront for proper planning.

Discuss your process configuration with an Endress+Hauser application engineer.

Contact us today