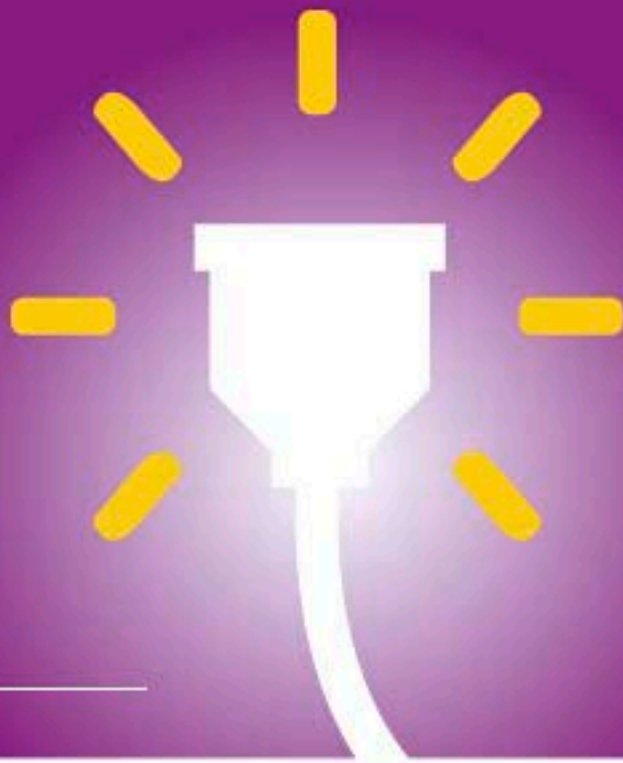


Intelligence in the connector

Intelligent connectors are a core component of the high-performance infrastructure in Industry 4.0, the way the concept is developed today. The transformation has begun.

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Concepts of the future such as Industry 4.0 place high demands on the performance of the supply infrastructure. At the same time, requisite reliability and security must not be achieved at the cost of a disproportionate utilization of resources. Quite the contrary: the cost efficient use of resources is one of the cornerstones of progress in industrial production. Condition monitoring systems permit the extrapolation of operating states and as such improve the prospect of meeting the necessary high availability, since

“Sensors in the connector enable the monitoring of infrastructure as well as machinery.

maintenance and service operations can be optimally planned, downtime is minimized.

Intelligent connectors equipped with sensors can not only record data, they can also process it and thereby provide input used in the control of other systems. They are considered core components of future high-availability infrastructure systems since they play a central role in data collection and are critical to the performance of the overall system.

System data that can provide information about the state of the plugged-in connection, completed mating cycles, transmitted power or the temperature of the contact point are not only suitable for monitoring junction points – such data can also provide insight into the state of the entire networked installation topology.



The data recorded and processed in the connector can be displayed both locally as well as made available to higher-order systems via the Cloud.

If changes in load can be logged in a connector inside a plant or system, non-permissible operating states such as e.g. an elevated current heating curve can be predicted and used to prevent damage to machines. Untapped potential can also be identified at the same time, and utilized in an optimal manner. ■

IN BRIEF

- The integration of sensors and the connector offers monitoring capabilities without additional installation effort.
- Intelligent installation infrastructures enable flexible production environments.