

Vacuum Terminal SCTSi Ethernet Communicates at Field Level

Complex manufacturing processes require intelligent systems. Depending on the particular process, these systems need to be able to work in complete synchronicity and thus communicate with one another in real-time. Schmalz has equipped the compact terminal SCTSi with an Ethernet interface for this very purpose.

The SCTSi Ethernet is part of the Connect product range and is the first smart field device from Schmalz to feature an Ethernet interface in place of an IO-Link interface. This enables it to communicate via the Industrial Ethernet standards EtherCat, EtherNet/IP as well as Profinet, which are designed for high real-time performance and robustness. The compact terminal consists of up to 16 ejectors, which are supplied with compressed air and power via a central inlet. The eco nozzle technology enables energy-efficient vacuum generation, while the automatic air saving function reduces compressed air consumption by up to 80 percent. Each compact ejector has a suction rate of up to 67 liters per minute and achieves a maximum vacuum of 85 percent. An integrated electronic sub-bus system controls the ejectors via a single cable and allows separate access to each individual ejector. This enables simultaneous and individual handling of different parts using only one vacuum system.

Designed for optimization

Bidirectional parameterization and diagnostics is possible in all conventional field-bus systems. This means that recorded data can be viewed and used all the way up to the control level. The resulting functions for process and system monitoring prevent downtime: While condition monitoring increases system availability by providing detailed analyses of the system's condition and early detection of faults, predictive maintenance registers subtle changes in the gripping system. In the event of loss of performance, users can take prompt action or schedule a replacement in good time. The energy monitoring function oversees the vacuum system's energy consumption.

Regardless of the communication with the plant control system, data and parameters can also be transmitted directly via smartphone or tablet using NFC technology (near-field communication). The

advantage of near-field technology lies in the secure communication via an energy-neutral point-to-point connection. Schmalz's ControlRoom app can be used both to read out data and parameterize devices.

Meta-Title: Real-time Capable Vacuum Automation with SCTSi Ethernet

Meta-Description: To facilitate the smart production processes of the future, Schmalz has equipped the compact terminal SCTSi with an Ethernet interface.

Keywords: Schmalz compact terminal SCTSi Ethernet smart field device vacuum system smart production NFC technology Industrial Ethernet compact ejector EtherCat, EtherNet/IP ProfiNet

Weblink:

<https://www.schmalz.com/en/vacuum-technology-for-automation/vacuum-components/vacuum-generators/compact-terminals/compact-terminal-sctsi-ethernet>

Images:



Image 1:

The compact terminal SCTSi Ethernet is a compact unit with multiple vacuum generators for simultaneous and individual handling of different parts using only one vacuum system.