The Central Module For Networked Pneumatics

Smart Pneumatics Monitor

- Local data collection and analysis independent of the control
- Pre-installed analysis modules for condition monitoring and energy efficiency analyses
- Simple creation of individual analyses
- Support of IoT-relevant communication interfaces

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Intelligent Pneumatics For The Internet Of Things

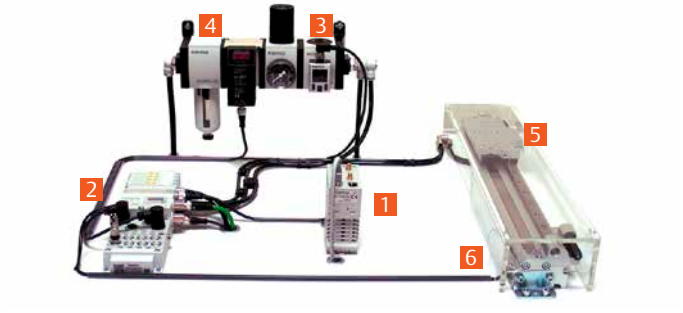
The Smart Pneumatics Monitor module provides you with reliable information on the state of wear of the actuators as well as the energy efficiency of your pneumatic systems – without the need to involve the machine control. This minimizes the risk of machine downtimes and significantly lowers operating costs.

Digitized pneumatics achieves a new level of productivity

The collection of operating states and their prediction as the basis for anticipatory maintenance and control concepts offer direct advantages, particularly for customers using IoT applications. Together with our AES fieldbus system, the SPM module detects in advance when critical limits will be reached and provides users with key information for early intervention. Moreover, the sensor data collected via the I/O modules also enables optimization of the pneumatic systems' energy efficiency. In line with the IoT concept, the system records local data independently of the control, and prepares and supplies the information via standard interfaces wherever it is required, whether in a local IT network or in the user's cloud solution.

SPM basic equipment and connections

- eSOM/3517 with TI AM3517 32-bit ARM Corte @600 MHz
- Linux OS with VPN and firewall
- Open source graphical user interface for data and analysis
- Optional LTE modem (GSM, UMTS, HSPA)
- 10/100 Mbps Ethernet LAN, 10/100/1000 Mbps Ethernet LAN, USB 2.0 host, DVI/HDMI, RS232/RS485 bundled to RS485, real-time clock
- 12 – 24 VDC power supply
- OPC UA Server/Client, Modbus Master, Modbus Slave, MQTT, S7 RFC1006, cloud connectors: SPA, Microsoft Azure IoT



1 | Smart Pneumatics Monitor
2 | AV03 valve unit with Profinet fieldbus an modular IOs
3 | PE5 Pressure Sensor
4 | AS3-AFS Flow Sensor
5 | RTC rodless cylinder
6 | ST4-2P two position sensors

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