Open Interface Extension



Real Time Interface for Process Monitoring

The Open Interface Extension (OIE) be used to combine sensor data from the process monitoring with the position data of the scan system. Compatibility with a wide range of sensors offers the user the greatest possible flexibility of process monitoring options.

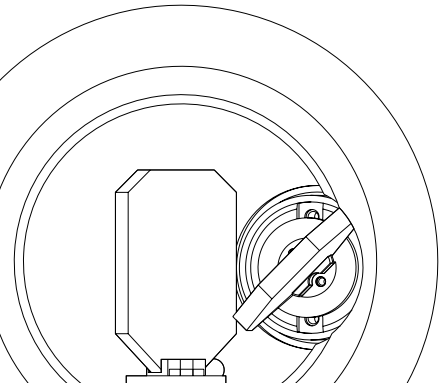
The OIE software tracks sensor signals to the location in the image field where they were recorded. The synchronized data is then available to the user for further analysis. In addition, the OIE enables real-time laser power control based on the recorded sensor signals.

Key Features

- Synchronization of process monitoring data with actual scanner positions
- Sensor-based closed loop laser power control
- Simple control cabinet integration

Compatibility

- ☑ RTC6 EtherBox
- ☑ RTC6
- ☑ Process monitoring sensors according to customer specifications



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Open Interface Extension – Features

Position Data

- Galvo feedback position data
- Position data in the machine's coordinate system considering assigned correction file
- 100 kHz position data (RTC6 PCIe: 25 kHz position data)
- Interpolation and averaging possible

Measured Value Recording

- Assignment to user defined vector IDs, e.g. generated from component or parameter IDs
- Interpolation and averaging possible
- Position-dependent calibration possible

Closed Loop Control

- 100 kHz PID control of laser power
- Logging of controller input/output
- High precision adjustment of control behavior

Data Streaming

- Data transmission via Ethernet
- User defined data stream and packet size
- Start of transmission immediately after start of measurement

Control

- Controlling the OIE via RTC list commands
- API for simple integration
- Vector recording
- Vector switching between different controller settings

Housing

- CE compliant (RoHS)
- EMC-tested
- Suitable for DIN rail mounting according to EN 60715

Technical Data

- 8 Single-Ended Channels, 1 MSPS Samplerate (400kHz @ 2 channels, 80kHz @ 8 channels)
- Every channel individually configurable: ±10 V, ±5 V, ±2.5 V, 0-5 V, 0-10 V, 4-20 mA or 0-20 mA
- 16 bit resolution
- E.g. for (2-color) pyrometers
- Power supply: 12–24 V

Types

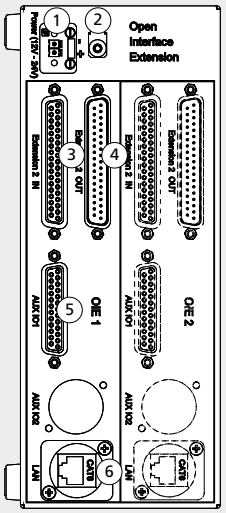
- Equipped with one OIE (Single)
- Equipped with two OIEs (Double)

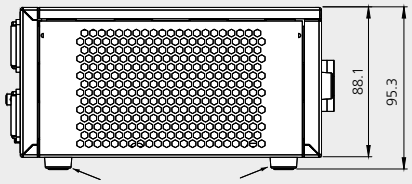
Compatible Scan Systems

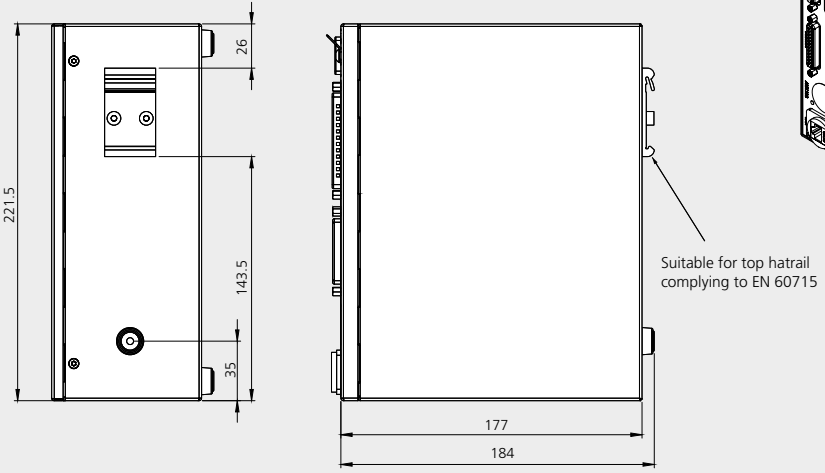
- System with read-back functionality, e.g. fiberSYS, excelli*SCAN*, intelli*SCAN*, *SCAN*cube IV

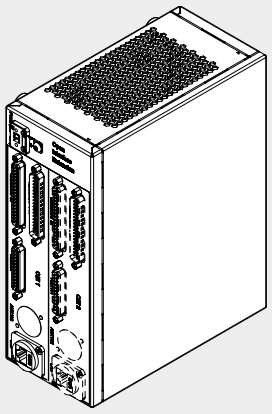
Connections and Dimensions

(All dimensions in mm; Dimensions of the housing for types Single and Double identical)









Legend

1 Power supply (12 – 24 V)
2 Grounding
3 RTC6 IN (37-pin D-SUB)
4 RTC6 OUT (37-pin D-SUB)
5 Sensor input (25-pin D-SUB)
6 Ethernet

11/2026 Information is subject to change without notice.
Product photos are non-binding and may show customized features.

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