# CUSTOMIZED ENGINEERING

Line temperature monitoring

IR 1D SCAN data sheet

#### BENEFITS

elma ec

- Measurement ranges: -40...3000°C\*
- Scan angle: up to 120° (adjustable)
- Modular system
- Compatible with RAYTEK Marathon MM and XR series pyrometers
- Indication of measuring spot position by laser point\*
- · Wide choice of models for various spectral and temperature ranges
- High-quality, reliable industrial drive unit
- Outputs: digital: solid-state relay
- analog: 0/4...20mA
- Robust IP65 certified housing
- High-performance air purge unit ensuring a clean measuring window
- Easy mounting to existing profile systems ('Bosch Rexroth', 'item' etc.)

\*) depending on the used pyrometer



#### DESCRIPTION / EXAMPLE OF APPLICATION

The SELMATEC IR 1D-Scan consists of a RAYTEK pyrometer and a swiveling device, allowing the system to measure temperatures along an axis in industrial manufacturing processes. This is an ideal solution for recording temperature profiles and detecting hot spots at continuous conveyor processes and process rollers (e.g. application rollers, corrugation rollers or tempering rolls). The system can be equipped with RAYTEK pyrometer series Marathon **MM** and **XR**. By selecting from additional options, such as a laser sighting device, shorter response times and thus faster scan speeds and/or a variable focus, a solution for almost any metrological problem can be achieved. Due to standard interfaces (analog output 0/4...20mA, digital output, RS485 interface) and mounting capabilities to common system profiles, a very easy and cost-effective integration into existing systems is possible.

## Measuring Parameters

Scan angle Scan speed (model examples) Emissivity Signal processing

Analog output Digital output Power supply

Scope of delivery

Max. 120° (adjustable) 6°/sec (1D-Scan XRLT) 36°/sec (1D-Scan MMLT) 0,1...1,0 digitally adjustable °C/ °F, min-, max-, mean, extended hold, background temperature compensation 0/4...20mA Solid-state relays Pyrometer: 24 VDC; min. 500 mA Drive: 24VDC; Imax in = 8A; Pmax = 100W 1D-Scan System incl. desired RAYTEK pyrometer; evaluation and parameterization software Data-Temp Multidrop® incl. RS232/RS485 adapter; intelliTool® parameterization software for the drive, as well as a 17-pin and a 4-pin cable socket suitable for the device connectors of the system

### GENERAL PARAMETERS

Housing

Protection class

Ambient temperature Storage temperature Relative humidity Vibration resistance

Impact load

Mechanical scanning

Dimensions (sensor unit)

Weight (sensor unit)

Warranty

Steel, powder-coated; aluminium profile IP65

0...50°C -10...65°C 10...90%, not-condensing IEC 68-2-6, 2G, 11 - 150Hz; 3 axes IEC 68-2-27, 5G, 11ms duration; 3 axes MTBF: 20.000 hours

481 x 140 x 86mm

approx. 5,5...6 kg, depending on the model 12 months

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MM

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#### MODELS

SEL-1DSCAN-XRLTH

SEL-1DSCAN-MMLT

Further models upon request

Measuring range: -40...800°C Scan speed: 36 °/seconds

XR Measuring range: -40...600°C Scan speed: 6 °/seconds

#### ACCESSORY PARTS

sel-1DSCAN-	Air purge unit
ACAP	

SEL-1DSCAN-Connection cables; pre-ACCB4 assembled cable socket/ remote wires; 4m Replacement protection (Foil)

SEL-1DSCAN-ACPWLT

Air purge unit

SEL-1DSCAN-ACAP





Replacement window

SEL-1DSCAN-ACPWLT

### System unit with connection dimensions (incl. air purge unit)



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