

# OS-2 Optical position sensor

PRELIMINARY INFORMATION  
SUBJECT TO CHANGES

OS-2 is a high-performance optical position sensor determining position by tracking x-y dimensional movements.

## Features

OS-2 has built-in image recognition system allowing tracking from different kind of surfaces, providing wide depth of field range.

Supports incremental positioning without any markings on the surface (absolute positioning requires a reference mark on the tracked surface or an external position signal).

Repeated Error of 1%\*, automatic correction can be used to reduce the error.

Motion detection (for system wake-up).

LED indicator for service and maintenance.

Firmware remotely upgradeable.

Interfacing via industry standard bus e.g. CANopen or 4-20mA, other interfaces on request (position data available in 16-bit integer format). Supplied with flying leads or customer specific connector.

Programmable sensor addresses.

Serial number and sensor version readable from permanent memory.

Optionally available in standard M12 sensor package.

## Applications

Measuring 1D or 2D movement, tracking rotating surfaces, repetition/cycle counters, programmable movement controls etc.



## Technical specification

Operating temperature	-20...+55 °C
Supply Voltage (VDD)	4,75...32 VDC
Current consumption @12V	20 mA
Resolution	
• Default:	100 cpi (0,254mm)*
• Configurable:	Up to 6700 cpi with 50 cpi steps *
Motion detection speed	Max: 2,2 m/s (90 ips)*
Max acceleration	30g *
Tracking Distance	20 mm typical min 2... max 55 mm *
Interface	CANopen (or 4-20mA)
Casing classification	IP67
Pressure rating	PN350
Dimensions (mm)	M12, 46 x Ø 8,9
Weight (g)	40

\* Values are typical for a glossy metal surface. Can differ for other surfaces.

Mikronix Oy

Aapistie 1, 3rd floor

90220 Oulu, Finland

FI27351636



**MIKRONIX**