



CHROCODILE 2 S/2 SE/2 S HS

Quality control via optical inspection



CHROcodile sensors have proven their operating capabilities, measuring performance and reliability in various industrial applications.

The second generation of these sensors is adapted to the current needs and trends of today's industry. Incorporating high-intensity LEDs, highly sensitive detectors and high-speed electronics in combination with fast Ethernet connection, the CHROcodile 2 S/2 SE enables measuring rates of up to 66 kHz. The sensor performs non-contact distance, topography, and thickness measurements, delivering accurate and reproducible results even in harsh industrial environments. A high dynamic range and excellent signal to noise ratio ensure reliable results even on highly reflective, rough or opaque materials.

CHROcodile 2 S HS optical sensor allows measurements on low reflective surfaces.

DISTANCE

THICKNESS

TOPOGRAPHY

EFFICIENT

- ▶ High measuring speed
- ▶ Precise
- ▶ Non-contact

VERSATILE

- ▶ Compatible with all point probes
- ▶ Wide thickness measuring range from 100 microns to 38.5 mm
- ▶ Measurement on all surfaces

USER-FRIENDLY & SAFE

- ▶ Simple to integrate
- ▶ Large graphic display
- ▶ Maintenance free and robust



TECHNICAL SPECIFICATIONS OF CHROCODILE 2 S | 2 SE | CHROCODILE 2 S HS

measured value	distance, thickness
measuring rate	CHRcodile 2 S 2 SE: up to 66,000 Hz; CHRcodile 2 S HS: up to 10,000 Hz
interferometric measuring range ¹⁾	CHRcodile 2 S 2 SE: 2 μm – 180 μm; CHRcodile 2 S HS: 2 μm – 150 μm
chromatic measuring range	depends on used optical probe
linearity ²⁾	$< 3.3 \times 10^{-4} \times$ upper measuring range limit
resolution	$3 \times 10^{-6} \times$ upper measuring range limit
number of measuring channels	1
synchronization with external devices	trigger input, synchronizing output, 5 encoder inputs
interface	Ethernet, RS-422, 2 x analog (-10 V to +10 V, 16-Bit)
transfer rate	Ethernet (100 Mbit), RS-422 (up to 10 MBaud)
light source	CHRcodile 2 S 2 S HS: LED CHRcodile 2 SE: LED, Xenon-Plasma light source (optional)
operating temperature	+5°C up to +50°C
dimension (w x h x d)	220 mm x 110 mm x 125 mm
weight	2 kg
supply voltage	16 – 30 V DC (with separate power supply 90 - 264 V AC)
rated power	20 W
item number	CHRcodile 2 S: 5007530 CHRcodile 2 SE: 5007531 CHRcodile 2 S HS: 5100981
note	CHRcodile 2 SE: external fiber coupler included

¹⁾ Optical length | ²⁾ Perpendicular measurement on mirror at 20 °C

The given data was generated for a typical application and may be different given other circumstances. Furthermore misprints, changes and/or innovations may lead to differences in the listed measurements, technical data and features. Therefore all information is non-binding and technical data, measurements as well as features are not guaranteed.

Precitec 3D Metrology - measure more precisely with light.