



# CHROCODILE 2 IT

Quality control via optical inspection



The latest generation of the proven CHRcodile sensor line offers an unrivaled speed of 70,000 measurements / second. The CHRcodile 2 IT optical sensor works with infrared light and is perfectly suited for distance and non-contact thickness measurement of non-transparent materials from one side.

The wide measuring range makes it perfectly useful for many measuring tasks in the quality assurance and production of wafers, solar cells and plastic products.

The extraordinarily dynamic response and the outstanding signal-to-noise ratio of the CHRcodile sensors ensure the best measuring results on surfaces with differing reflectivity.

DISTANCE

THICKNESS

TOPOGRAPHY

## EFFICIENT

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

## VERSATILE

- ▶ Wide thickness measuring range
- ▶ Polished and rough surfaces
- ▶ Visually transparent and non-transparent materials
- ▶ Measurement from one side
- ▶ Inline and offline
- ▶ High lateral resolution
- ▶ Distance measurement (optional)

## USER-FRIENDLY & SAFE

- ▶ Simple to integrate
- ▶ Large display presenting measuring parameters
- ▶ Nondestructive measurement
- ▶ Robust
- ▶ Automatic light control
- ▶ Wide measuring distance tolerance range



## TECHNICAL SPECIFICATIONS OF CHROCODILE 2 IT 500 | 1000 | RW 500 | RW 1000 | 1300 | 1700

application	distance, thickness
measuring rate	up to 70,000 Hz
interferometric measuring range <sup>1)</sup>	CHRcodile 2 IT 500: 38 µm - 4300 µm
	CHRcodile 2 IT 1000: 66 µm - 7500 µm
	CHRcodile 2 IT 500 RW: 44 µm - 4900 µm
	CHRcodile 2 IT 1000 RW: 57 µm - 6400 µm
	CHRcodile 2 IT 1300: 87 µm - 10500 µm
	CHRcodile 2 IT 1700: 114 µm - 12600 µm
linearity <sup>2)</sup>	$< 3.3 \times 10^{-4} \times$ 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	SLD
operating temperature	+5°C up to +50°C
dimensions (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 IT 500: 5007391
	CHRcodile 2 IT 1000: 5007546
	CHRcodile 2 IT 500 RW: 5007389
	CHRcodile 2 IT 1000 RW: 5007547
	CHRcodile 2 IT 1300: 5009529
	CHRcodile 2 IT 1700: 5010786

<sup>1)</sup> Optical length | <sup>2)</sup> 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.**