

CHROCODILE 2 IT

Quality control via optical inspection



The latest generation of the proven CHRocodile sensor line offers an unrivaled speed of 70,000 measurements / second. The CHRocodile 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 CHRocodile sensors ensure the best measuring results on surfaces with differing reflectivity.

DISTANCE

THICKNESS

L BERÜHRUM — S P**räzise** sch Näzisë schni berührungslo

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 ¹⁾	CHRocodile 2 IT 500: 38 μm - 4300 μm CHRocodile 2 IT 1000: 66 μm - 7500 μm CHRocodile 2 IT 500 RW: 44 μm - 4900 μm CHRocodile 2 IT 1000 RW: 57 μm - 6400 μm CHRocodile 2 IT 1300: 87 μm - 10500 μm CHRocodile 2 IT 1700: 114 μm - 12600 μm
linearity ²⁾	$< 3.3 \times 10^{-4} \times 10^{-4$
resolution	< 3 x 10 ⁻⁶ x 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	CHRocodile 2 IT 500: 5007391 CHRocodile 2 IT 1000: 5007546 CHRocodile 2 IT 500 RW: 5007389 CHRocodile 2 IT 1000 RW: 5007547 CHRocodile 2 IT 1300: 5009529 CHRocodile 2 IT 1700: 5010786

 $^{^{1)}}$ Optical length $\mid ^{2)}$ 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.