



CHROCODILE 2 DPS

Quality control via optical inspection



The CHROcodile 2 DPS chromatic confocal sensor is equipped with two independent channels that enable simultaneous evaluations from both channels at the full measurement rate.

An embedded processor in the CHROcodile controller uses signals from the individual channels, synchronizes the data, and gives out directly the result of thickness or step height measurements. That is why the CHROcodile 2 DPS is the ideal fit for two-sided thickness measurement of non-transparent materials or layers where the thickness exceeds the measuring range of a single probe.

Furthermore, step height and multi-layer thickness measurements are also feasible. In addition, the embedded processor enables the CHR controller to carry out automatic referencing with no extra hardware needed for thickness or step height measurements.

DISTANCE

THICKNESS

TOPOGRAPHY

EFFICIENT

- ▶ Replaces and combines two individual sensors
- ▶ Adjustable measuring rate: 32 Hz - 10 kHz
- ▶ Cost-efficient solution

VERSATILE

- ▶ Usable on all surfaces: non-transparent, structured or index-matched material and coated layers
- ▶ Five encoder inputs, trigger, sync-output
- ▶ Two channels: Two-sided thickness measurement, step height and multi-layer measurements
- ▶ Compatible with any fiber-connected chromatical probe

USER-FRIENDLY & SAFE

- ▶ Easy to use
- ▶ Synchronization and referencing post-processing embedded
- ▶ Auto-adapt light function
- ▶ Ethernet, RS-422
- ▶ Robust and maintenance-free

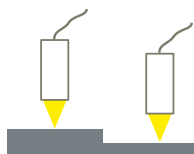


TECHNICAL SPECIFICATIONS OF CHROCODILE 2 DPS

application	distance, thickness
measurements per second/channel	10,000
linearity ¹⁾	3.3×10^{-4} x upper measuring range limit
resolution	3×10^{-6} x upper measuring range limit
repeatability ²⁾	9×10^{-5} x upper measuring range limit
number of measuring channels	2
synchronization with external devices	trigger input, synchronizing output, 5 encoder inputs
interface	Ethernet, RS-422
transfer rate	100 Mbit (Ethernet), 9600 - 921600 Baud (RS 422)
light source	LED
fiber connection	2 x E 2000
length optical fiber	2 x 2 m - 40 m (multi mode fiber)
dimension (w x h x d)	220 mm x 110 mm x 125 mm
weight	1.8 kg
supply voltage	16 - 30 V DC (with separate power supply 90 - 264 V AC)
rated power	20 W
order number	5010534

¹⁾ 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 by information in this product information.



step height
measurement



two-sided thickness
measurement

Precitec Optronik - the smart way to measure.