

STIL ZENITH

SERIES

WHERE
SPEED MEETS
CONTACTLESS
PRECISION &
ACCURACY

20 kHz



MARPOSS

INTRODUCTION

STIL Marposs introduces its latest chromatic confocal solution, Zenith20C2, dedicated to precision measurements in the manufacturing industry in particular for the R2R industry.

DESCRIPTION

Zenith20C2, with 2 synchronized channels, 20 kHz sampling rate each is perfect for all applications where the measure is obtained by a combination of 2 Optical sensors in dynamic mode. Zenith20C2 is suitable and compact for applications where it is required to measure the internal diameter, external diameter and thickness of transparent or not transparent material. The ZENITH20C2 Controller is the new reference of the Chromatic Confocal Controller adapted to the Industrial environment. Based on standard Ethernet Communication, ZENITH allows measurements at very high speed without contact and without risk of alteration of the parts. ZENITH20C2 controller is compatible with all STIL MARPOSS sensor heads: CL-MG, OP, ENDO, EVEREST... Flexible, ZENITH20C2 controller has a performance adapted to each measurement range. The ZENITH20C2 controller is made up of a new generation of components which, in combination with the huge variety of STIL MARPOSS Point sensor heads, allow to offer both excellent metrological performance & High Speed measurement.

BENEFIT

The robustness, easy-to-implement and easy-to-use is destined to work 24/7. ZENITH20C2 offers high-resolution distance and thickness measurement on all types of surfaces and materials including reflective surfaces. Built with the highest quality standards since 2021, the ZENITH20C2 controller is a robust and reliable product suitable for use in an industrial environment as in labs.

PRODUCT	ZENITH 5C1	ZENITH 5C2	ZENITH 10C1	ZENITH 10C2	ZENITH 20C1	ZENITH 20C2
Order code Export Free (E)	08ST17E1004	08ST17E1102	08ST17E1201	08ST17E1301	08ST17E1401	08ST17E1501
Order code Dual Use (D)	08ST17D1004	08ST17D1102	08ST17D1201	08ST17D1301	08ST17D1401	08ST17D1501
Technology	Chromatic Confocal					
Source	White LED					
Number of channels	1	2 (simultaneous)	1	2 (simultaneous)	1	2 (simultaneous)
Measuring frequency	Up to 5 kHz		Up to 10 kHz		Up to 20 kHz	
Measuring range	From 100 micrometers to 100 millimeters depending on the associated sensor head					
Axial resolution	Version (E) > 0,25 µm / Version (D) >0,001 µm					
Calibration table memory	Up to 20 calibration tables					
Distance measurement	1 peak among 8: First/Second/.../Seventh/Eighth/Last/Strongest					
Thickness measurement	2 peaks among 8					
Advanced features	AutoLed/AutoDarkDoubleFrequency HoldLastValue...					
Digital output	Ethernet (GigE) and RS422					
Synchronization	Trigger in (5V TTL or 5-24Vdc or encoder) & Trigger out (5V TTL)					
Other Input/Output	Up to 5 encoder inputs (differential TTL)					
Fiber connection	E2000/APC					
Temperature in use	+5 to + 50°C					
Storage temperature	+30 to +70°C					
Relative humidity	5% to 80% RH without condensation					
Protective type	IP 40					
Compliance	Electromagnetic compatibility (EN 61326-1) Cold operation at +5°C (CEI EN 60068-2-1 A) Stationary hot humid operation at +45°C and 93% RH (CEI EN 60068-2-78) Cold storage at -20°C (CEI EN 60068-2-1 A) Dry hot storage at +65°C (CEI EN 60068-2-2 B) 5G Sinusoidal vibrations (CEI EN 60068-2-6 FC) Degree of tightness IP40 (CEI EN 60529)					
Power Supply	24 VDC					
Maximum/Usual Consumption	25W/15W					
Dimensions (mm)	169 x 110 x 88					
Weight	1.2 kg					