

■ Controllers for configurable sensors: technical specifications

Controllers	CHR Series		CCS Series		
Model	CHR150	CHR150-L	CCS-PRIMA	CCS-OPTIMA	CCS-ULTIMA
Measuring frequency	From 30 to 1000 points/sec User defined	From 30 to 1000 points/sec User defined	From 100 to 2000 points/sec User defined	From 100 to 5000 points/sec User defined	From 500 to 30000 pts/sec User defined
Multichannel version ⁽¹⁾	Available (2 & 4 channels)	Available (2 & 4 channels)	Available (2 & 4 channels)	Not available	Not available
Light source	Halogen	White LED	White LED	White LED	Xenon arc (external)
Light source brightness setting	None	Manual	Programmable	Programmable	Manual (on external source)
Advanced Features: «Lock on first surface» «Hold Last Value» «Thickness calibration» «Auto LED» ⁽²⁾ «Autodark» function ⁽³⁾ «Double frequency»	No No No No No Up to 489 Hz	No No No No No Up to 489 Hz	Yes Yes Yes Yes Yes Up to 1850 Hz	Yes Yes Yes Yes Yes No	Yes Yes Yes No Yes No
Measuring modes	Distance Thickness	Distance Thickness	Distance Thickness	Distance Thickness	Distance Thickness
Calibration tables (max)	6		20		
Encoders input ⁽⁴⁾	No	No	Yes (up to 3 axes) - TTL signals input - 30 bits counters (> 1 billion steps count)		
Digital outputs	15 bits resolution		30 bits resolution	15 bits resolution	
Analog outputs	2 configurable outputs [0 – 10 V] - 12 bits resolution		2 configurable outputs [0 - 10V] - 16 bits resolution		
Digital I/O	RS232 (up to 115200 bauds) serial link		USB2 and RS232/RS422 (up to 46800 baud)		
Synchronization I/O	1 Synchro input (TTL) / 1 Synchro output (TTL)		1 Synchro input (TTL) / 1 Synchro output (TTL)		
Optical fiber connector	E2000 type («push-pull») with «Autoprotect» system				
Compatible Optical pens	All chromatic confocal pen types				
Power supply / consumption	From 85 to 240 V AC / 100 W	From 85 to 240 V AC / 25 W	24 V DC / 20 W		
Temperature in use	5°C - 40°C				
Storage temperature	-30°C – 70°C				
Relative humidity in use	5%-80% HR without condensation				
Protection type	IP 40				
EMC	EN 61000-6-3 and EN 61000-6-2 compliant				
Weight ⁽⁵⁾	3.4 kg		1.4 Kg		
Dimensions (w x h x d)	316mm x 96mm x 235mm		168mm x 138mm x 120mm		
Mechanical interface	Table top controller		Integrated DIN rail mounting interface		

(1) Multiplexed channels (CCS) Vs simultaneous multiple channels (CHR):

- CCS PRIMA4 multiplexed sensor: 1 (out of 4) optical pen can measure at a time, the sensor can switch to another optical pen in about 400 ms.
- CHR150-2 and CHR150-4 Multiple channels: All the optical pens (2 or 4) can measure simultaneously.

(2) The «Auto Led» function allows the CCS Prima controller to dynamically adjust the LED light power in order to permanently adapt it according to the reflectivity of the measured object.

(3) The «Autodark» function allows a constant and automatic regulation of the Dark signal level of the CCS controller.

(4) The incremental encoders input port allows the acquisition of the instant position of the measuring system motion axes (3 axes maximum). These measurements are synchronized with the measuring frequency of the sensor.

(5) The specified weight does not include the external light source for the CCS Ultima model.

N.B. : the values are subject to change without notice.