










# More Precision

**confocalDT HS** // High speed, confocal chromatic measurement system



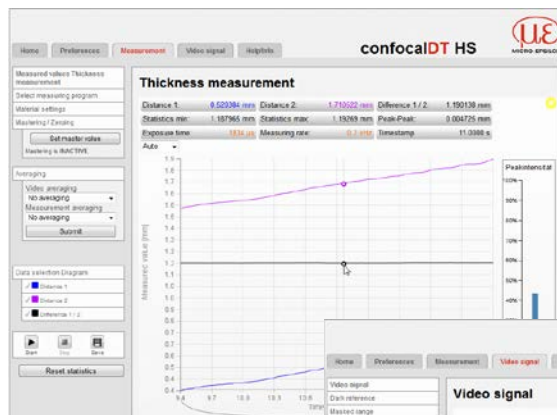


-  **Fastest controller worldwide:**  
Measuring rate up to 70kHz
-  **Interfaces: Ethernet / EtherCAT / RS422 / Analogue**
-  **Fast surface compensation**
-  **Configuration via web interface**
-  **Submicrometer resolution**
-  **Multi layer thickness measurement**
-  **Robust design with passive cooling**

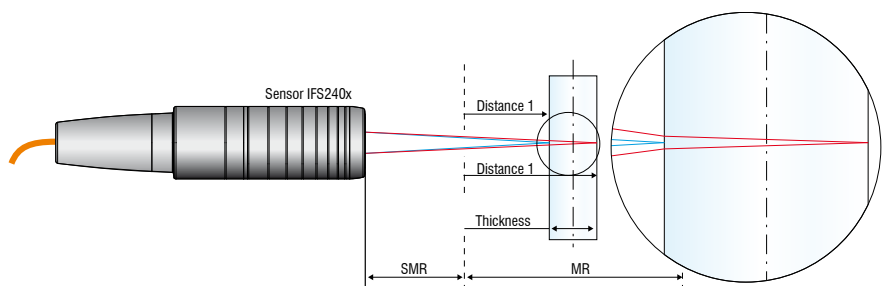
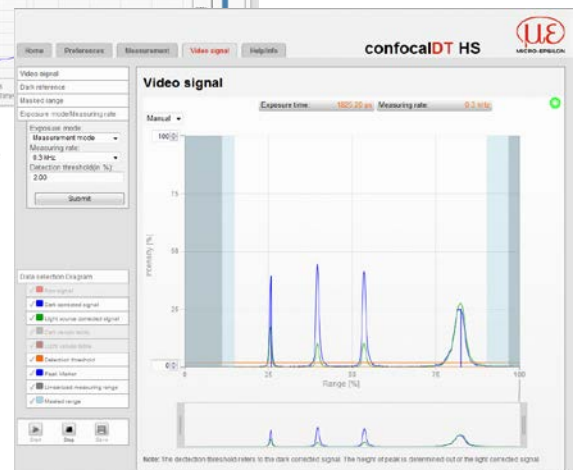
The confocalDT 2471 HS controllers are used for fast distance and thickness measurements of highly reflecting surfaces. The controllers are equipped with enhanced optical components enabling measuring rates up to 70kHz without having to use an external light source. The confocalDT HS controllers are considered one of the fastest confocal measurement systems in the world. The active exposure regulation feature in the CCD array enables accurate, fast surface compensation on difficult changing surfaces during dynamic measurement processes.


The controller can be operated with any IFS sensor and is available as a standard version for distance measurements or as a multi-peak version for thickness measurements.

Due to a user-friendly web interface, the entire configuration process is carried out without using any additional software. Data output is via Ethernet, EtherCAT, RS422 or analogue output.

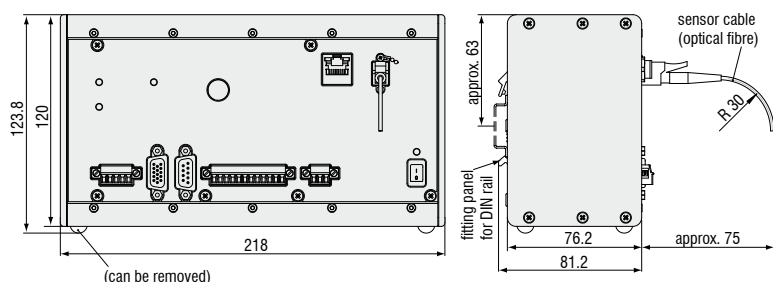


All settings are performed in the web interface. Materials are stored in an expandable materials database.



Controller	IFC2471LED	IFC2471MP LED
Multi peak measurement	2 peaks	up to 6 peaks
Light source	internal white LED	
Measuring rate	continuously adjustable, 100Hz to 70kHz	
Resolution	Ethernet / EtherCAT	1nm
	RS422	18bit
	analogue	16bit
Storage	up to 20 calibration tables for different sensors, menu selection	
Controller inputs / outputs	sync-in / trigger-in, sync-out error1-out, error2-out encoder (3x A, B, Index) EtherCAT/Ethernet RS422 analogue: current, voltage (16bit D/A converter)	
EtherCAT		
Operating elements, controller display	On/Off switch; Button for dark alignment (as well as for reset to factory setting after 10sec) 4x LED for intensity, range, status, supply voltage	
Supply voltage, power consumption	24VDC $\pm$ 15%, ~ 10W	
Housing	Aluminium case for DIN rail mounting	
Protection class	IP40	
Operating temperature	5°C ... 50°C	
Storage temperature	-20°C ... 70°C	
Permissible ambient light	30,000lx	
Safety; EMC interference emission Interference resistance	CE EN 61 000-6-3 / DIN EN 61326-1 (class B) EN 61 000-6-2 / DIN EN 61326-1	
Shock	15g, 6ms	
Vibration	2g / 10Hz ... 500Hz	
Optical fibre cable length	Sensor	2 ... 50m
	Connector	E2000
Cable length (all cables are shielded)	EtherCAT, Ethernet	CAT5E; length < 100m
	Supply, RS422, sync./error	< 30m
	analogue	< 30m
Encoder	< 3m	

#### Controller IFC2471 LED



## High performance sensors made by Micro-Epsilon



Sensors and systems for displacement and position



Sensors and measurement devices for non-contact temperature measurement



2D/3D profile sensors (laser scanner)



Optical micrometers, fibre optic sensors and fibre optics



Colour recognition sensors, LED analyzers and colour online spectrometer



Measurement and inspection systems