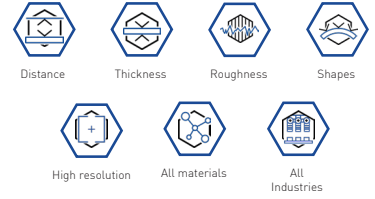
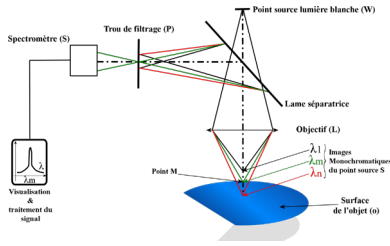
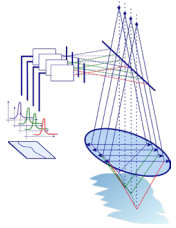


INTRODUCTION CHROMAPOINT



BACKGROUND: MULTIPPOINT 180



MPLS-DM



MPLS-DMRD

OBJECTIVES: HIGH DENSITY

HIGH PERFORMANCES

- High sensitivity**
 - Faster measurement
 - Works on heterogeneous materials
- High Dynamic Range**
 - Better Signal/Noise ratio
 - Low light detection
 - Reduced Saturation
- High resolution**
 - Reduced measurement noise

QUALITY & DESIGN

- Industrial design**
 - Co-Designed with Marposs HQ
- Robustness**
 - Shock & vibration resistance
 - EN 60068 Norm
 - IP40

ULTIMATE COMPONENTS

- Improved LED with « flat » spectrum
- High sensitivity CMOS sensor
- Powerfull FPGA for data processing
- Optimised Spectrometer

SECURED DATA

- Secured connectivity
- Advanced Encryption Standard process
- RSA Digital Signature

USER FRIENDLY INTERFACE

- Gigabit Ethernet
- Encoder trigger, Trigger In 5-24V
- Master/Slave mode
- 5 encoder inputs
- Web server interface
- User friendly software interface

Number of Points: Thousands - Maximum Frequency Acquisition: 10 000 lines / second - Light Sources: High Intensity & Homogeneous Spectrum of White Light LED

METHODS: DESIGN & COMPONENTS

DESIGN

Dedicated White Light Optical paths for emission
No Cross-Talk
Spectrometer Data Acquisition Post-Treatment embedded & optimized
Protocol of communication adapted to transfer high quantity of data.



COMPONENTS

- Optical Couplers**
 - Signal to Noise Ratio optimized by Noise reduction
 - Flexibility from the controller to the optical head(s)
- Optical Lens**
 - No aberration out of the axes
 - Photometric Efficiency
- Dual Matrix High Speed Camera**
 - Hundreds of lines distributed to collect each retrodiffused point
- Ethernet Connection**

STATE OF THE ART MPLS-DM 180

High Speed

Klines/second

Axial Resolution

Accuracy: Nanometer scale
Homogeneity along the line

Lateral Resolution

Spot Size: Micrometer scale
Pitch

Flexibility

One or several Optical Heads compatible
Easy installation



Product	Unit	MPLS-DM NANOVIEW	MPLS-DM WIREVIEW	MPLS-DM MICROVIEW	MPLS-DM DEEVIEW mk2	MPLS-DM SUPERVIEW
Order Code		OPSTM705002	OPSTM710002	OPSTM706002	OPST0707002	OPSTM711001
Line Length	mm	1.34	1.51	1.8	4.2	12.85
Measuring Range 2 kHz	mm	0.12	0.9	0.5	2.6	2
Working Distance	mm	7.4	7.8	10.1	19.5	11.3
Numerical Aperture		0.75	0.75	0.5	0.37	0.33
Max. Sample Slope	°	± 43	± 46	± 30	± 20	± 17
Pitch (dist. between 2 points)	µm	7.5	8.5	10.1	23.5	71.8
Max. Linearity Error	µm	± 0.04	± 0.1	± 0.08	± 0.12	± 0.12
Static Noise	nm	25	150	100	300	300
Axial Resolution	µm	0.15	0.9	0.6	1.8	1.8
Spot Size	µm	2.9	3.2	3.8	8.8	27.2
Homogeneity	nm	30	200	125	400	400
Min. Measurable Thickness	µm	18	110	50	250	300
Length	mm	436.1	482.5	427.3	428.3	397.8
Diameter	mm	50	70	50	60	60
Weight	g	2350	2850	2250	2800	2550
Measuring Range 4 kHz	mm	0.055*	0.45*	0.235*	1.15*	0.9*
Measuring Range 6 kHz	mm	0.030*	0.24*	0.12*	0.65*	0.5*

TARGETED SEGMENTS & APPLICATIONS

- EV**
 - Batteries
 - Hair pin
 - Thin film
 - E-drive
- 3C**
 - Metal
 - Glass
 - Glue
- Automotive**
 - Windshield
 - Side glass
 - Backlight
 - ...
- Packaging**
 - Glass containers
 - Glass vials
- Semicon**
 - Wafer thickness
 - Bumps
 - Wire bonding
- Biomedical**
 - Protesis
 - Lenses
 - Microfluidic
 - ...