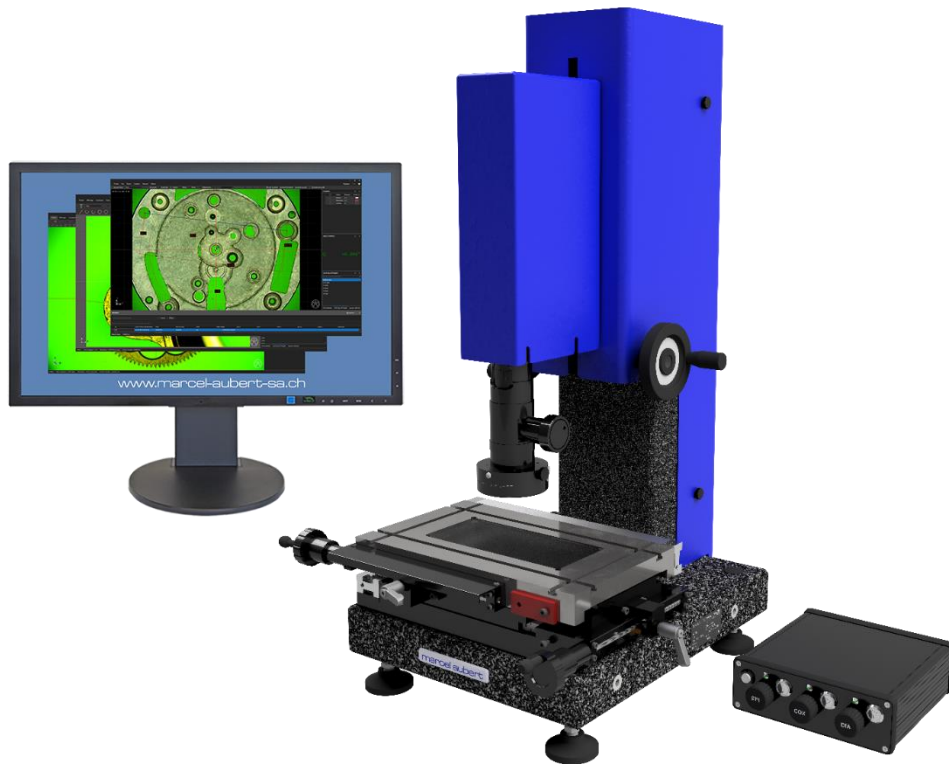




Optimum GL 150 / 200M

Video measuring system



MA 185 & MA 186



This versatile enclosed workshop measuring machine offers great flexibility in the workplace thanks to improved ergonomics. The very high stability of the Z-axis column is optimized for measurements on panoramic images, composed using the "integrated image" (or "stitching") function. The Optimum GL meets the most demanding applications thanks to its wide choice of zoom-optics for very high magnifications or telecentric optics with very large depths of field.

- Granit base.
- Manual or motorized X-Y table.
- Manual or motorized Z column.
- Zoom-optics with indexes or telecentric optics.
- 3.2 or 6.4 Mpx USB 3.0 color camera.
- LED circular illuminator.
- Computer with 27" monitor.
- Wide choice of measuring and comparison software.
- Glass chromium deposit calibration ruler.

Technical specifications

	 Optimum GL 150	 Optimum GL 200M
X-Y table range [mm]	150x70 manual	200x100 motorized
Table precision [mm]	0.003 / 100	
Z column range [mm]	140 manual	140 motorized
Column precision [mm]	0.020 / 100	
X-Y axis rulers	Heidenhain (Display resolution : 0.001mm)	
Z axis rulers	Optional	Heidenhain
Weight (kg)	108	165
Dimensions column lowered (W x D x H) [mm]	520 x 620 x 780	650 x 720 x 740

Optical choice 1

Camera	Color 3.2 Mpx USB 3.0	
Optics	12X zoom / 8 indexes	
Magnifications *	25X to 310X	
Fields of view [mm]	18.3 x 13.7 to 1.5 x 1.1	
Pixel resolution [μm] **	8.9	to 0.7
Focal length [mm]	86	

Optical choice 2

Camera	Color 3.2 Mpx USB 3.0	
Optics	12X zoom / 8 indexes	
Magnifications *	40X to 470X	
Fields of view [mm]	12.2 x 9.2 to 1 x 0.8	
Pixel resolution [μm] **	5.9	to 0.5
Focal length [mm]	86	

Optical choice 3

Camera	Color 6.4 Mpx USB 3.0	
Optics	8X zoom / 4 motorized positions / Telecentric	
Magnifications *	18X to 144X	
Fields of view [mm]	29.7 x 19.9 to 3.7 x 2.5	
Pixel resolution [μm] **	9.6	to 1.2
Field depths [mm]	11	to 0.2
Focal length [mm]	74	

* = Indicated magnifications are calculated on 27" monitor and may be reduced by up to 12% according to the software configuration.

** = Camera pixel size / (sensor size / field of view)

Software		
Functions	VideoPLAN 	M3 
Displaying a reticle / cross	✓	✓
Saving an image	✓	✓
Saving measurements	✓	✓
Measuring / displaying angles	✓	✓
Distance measurement	✓	✓
Depth measurement	✓	✓
Importing and comparing DXF drawing	✓	✓
Diameter and radius measurement	✓	✓
Measurement protocol	✓	✓
Display of X and Y axis	✓	✓
Display of Z axis	✓	✓
Automatic measurement by image processing	-	✓
Displaying and moving up to 2 pairs of lines	-	-
Displaying and moving up to 3 pairs of lines	-	-

Options

	Concentricity measuring tool for T-slot MA 145-003-02 (150) MA 146-003-02 (200M)		Cast iron rotary table with graduation MA 145-15-70G (150)
	Concentricity control for T-slot MA 145r (150) MA 146r (200M)		Aluminum rotary table with graduation MA 145-16-70G (150)
	Manual divider for T-slot MA 145d (150) MA 146d (200M)		Aluminum rotary table MA 145-16-70 (150)
	±15° rotating between centers clamping bracket for T-slot MA 145a (150) MA 147a (200M)		Vice (capacity 15mm) MA 143b-004 (150 / 200M)
	Prism with clamping flange for T-slot MA 145e (150) MA 146e (200M)		Adjustable vice (capacity 15mm) MA 143b-005 (150 / 200M)
	Crocodile-pliers for T-slot MA 145b (150) MA 146b (200M)		Crocodile-pliers on round support MA 143-010-01 (150 / 200M)
	Clamp with parallel jaws for T-slot MA 145b-001 (150) MA 146b-001 (200M)		Clamp with parallel jaws on round support MA 143-010-02 (150 / 200M)
	Collet holder for T-slot MA 145bZ (150) MA 146bZ (200M)		Collet holder on round support MA 143-010-03 (150 / 200M)
	V-block with spring clip for T-slot MA 145c (150) MA 146c (200M)		V-block with spring clip on round support MA 143-010-04 (150 / 200M)
	Ø40mm diaphragm for transmitted illuminator 45-030-01 (150)		Digital ruler Z-axis MA 461-305-03 (150)
	Digital display Mx100 MCA-300-101 (150)		Digital calculator Mx200 MCA-300-201 (150)