

Garant**Video measuring microscope MM1, Type: 200****Order data**

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|--------------|---------------|
| Order number | 492500 200 |
| GTIN | 4062406159702 |
| Item class | 41P |

Description**Version:**

Measuring microscope with quick image processing, high-resolution colour camera, and a multi-touch panel PC that is easy to operate and suitable for the workshop environment, with **intuitive M3 measurement software**.

Incident illumination: 56 white LEDs in 2 concentric rings. 1 ring and 4 segments can each be separately switched and dimmed.

Transillumination: Long-life LEDs, telecentric, can be switched and dimmed. **Solid granite base** with surface-hardened indexing table and high-precision guides. Ergonomic quick adjustment with one-handed operation in both axes (X and Y). **Diode laser** as positioning guide. Very high repetition accuracy thanks to **automatic edge detection**.

Now with M3 software version 4:

- **With modern 64 bit application for easy handling of large data.**
- **Extended measurement programme recording mode with optional standard or extended recording mode.**
- **Save and load reference system: ideally suited to the use of quick-clamping systems.**
- **New export functions such as direct export to PDF and improved speed for direct export to Excel.**

Application:

- **In goods receiving, in the inspection room, in manufacturing.**

- **Suitable for general purpose use due to flexible four-quadrant incident light and compact measurement computer.**
- **A wide variety of geometric shapes and materials can be reliably measured in a user-friendly manner. Documentation can also be performed.**

Cutting data:

Zoom level / Shown on display / Field of view: 0.35× / 16× / 20×13 mm².

Zoom level / Shown on display / Field of view: 0.5× / 23× / 14×9 mm².

Zoom level / Shown on display / Field of view: 1× / 43× / 7×4 mm².

Zoom level / Shown on display / Field of view: 1.5× / 65× / 4×3 mm².

Zoom level / Shown on display / Field of view: 2× / 90× / 3×2 mm².

Zoom level / Shown on display / Field of view: 2.5× / 100× / 3×2 mm².

Supplied with:

All-in-One PC, wireless mouse and keyboard, dust cover, power supply unit, test certificate, and user manual.

Optional extras:

Lens No. 491912, software option No. 491913, cutting edge cleaner No. 354788.

Note:

Length measurement variation $E_{U_{XY}, MPE}$ to DIN EN ISO 10360-7 for magnification factor = 0.5.
Permissible ambient conditions: 20 °C ± 1 K, temperature gradient $\Delta_{th} = 0.5$ K/h, $\Delta_{th} = 4.0$ K/d, measured with a calibrated standard.

For all GARANT video measuring microscopes we can offer you the following on request:

- **Maintenance contract.**
- **Installation and commissioning with brief instruction on use.**
- **Individual training for your employees.**
- **On-site calibration.**

We reserve the right to make technical changes and to change the touch panel version.

Technical description

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|-------------------------------------|----------------|
| Magnification at the screen (times) | 23 |
| Measuring range X | 200 mm |
| Working distance | 80 mm |
| Measuring range Z | 100 mm |
| Weight | 60 kg |
| Camera | 6.4 megapixels |
| Measuring range Y | 100 mm |
| Width | 600 mm |
| Field of view | 14×9 mm |

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|--|--|
| Length | 500 mm |
| Length measurement variation $E_{UXY, MPE}$ optically (2D) | $2.9 + L / 100$ (L in mm) at $20\text{ °C} \pm 1\text{ K}$ μm |
| maximum component height | 100 mm |
| maximum component weight | 20 kg |
| Height | 770 mm |
| Lens (times) | 0.5 |
| Nominal voltage | 230 / 240 V |
| Power supply | Mains operated |
| Type of product | Video measuring microscope |

Accessories

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|---|---------------|
| Accessories for video measuring microscopes Type FEDER | 491917 FEDER |
| Anti-slip mat A5 × 1 mm | 491955 |
| Dust cover Type 200 | 491919 200 |
| Lens for measuring microscopes MM1/MM2 Type 3 | 491912 3 |
| Software option for MM1 Type DXF | 491913 DXF |
| Software option for MM1 Type PROFIL | 491913 PROFIL |
| Spare glass plate for video measuring microscope MM1 Type 200 | 491948 200 |