

**Garant****Video measuring microscope MM1, Type: 300/6X****Order data**

|              |               |
|--------------|---------------|
| Order number | 492500 300/6X |
| GTIN         | 4062406160234 |
| 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.**

With 6-step manual raster zoom lens, magnification from 0.35x to 2.25x and coaxial light for uniform illumination of components.

**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 mm<sup>2</sup>.

**Zoom level / Shown on display / Field of view:** 0.5× / 23× / 14×9 mm<sup>2</sup>.

**Zoom level / Shown on display / Field of view:** 1× / 43× / 7×4 mm<sup>2</sup>.

**Zoom level / Shown on display / Field of view:** 1.5× / 65× / 4×3 mm<sup>2</sup>.

**Zoom level / Shown on display / Field of view:** 2× / 90× / 3×2 mm<sup>2</sup>.

**Zoom level / Shown on display / Field of view:** 2.5× / 100× / 3×2 mm<sup>2</sup>.

**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  $E_{UXY, MPE}$  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.

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**Technical description**

|  |   |
|--|---|
| Lens (times)   | 0.35 – 2.25                                   |
| Field of view  | 20×13 – 3×2 mm                                |
| Measuring range Z  | 200 mm  |
| Length measurement variation $E_{UXY, MPE}$ optically (2D) | 2.9 + L / 100 (L in mm) at 20 °C ±1 K $\mu$ m |
| Working distance   | 80 mm   |
| Measuring range Y  | 200 mm  |
| Camera   | 6.4 megapixels                                |

|                                     |                            |
|-------------------------------------|----------------------------|
| Weight                              | 115 kg                     |
| Width                               | 900 mm                     |
| Measuring range X                   | 300 mm                     |
| maximum component height            | 200 mm                     |
| Height                              | 950 mm                     |
| Magnification at the screen (times) | 16 – 100                   |
| Length                              | 730 mm                     |
| maximum component weight            | 20 kg                      |
| Nominal voltage                     | 230 / 240 V                |
| Power supply                        | Mains operated             |
| Type of product                     | Video measuring microscope |

## Accessories

|   |                 |
|---|-----------------|
| Dust cover Type 300   | 491919 300      |
| Lens for measuring microscopes MM1/MM2 Type 3                     | 491912 3        |
| Base cabinet for measuring microscopes width×depth<br>1800X900 mm | 491914 1800X900 |
| Software option for MM1 Type PROFIL                               | 491913 PROFIL   |
| Anti-slip mat A5 × 1 mm   | 491955          |
| Accessories for video measuring microscopes Type FEDER            | 491917 FEDER    |
| Software option for MM1 Type DXF                                  | 491913 DXF      |
| Spare glass plate for video measuring microscope MM1<br>Type 300  | 491948 300      |