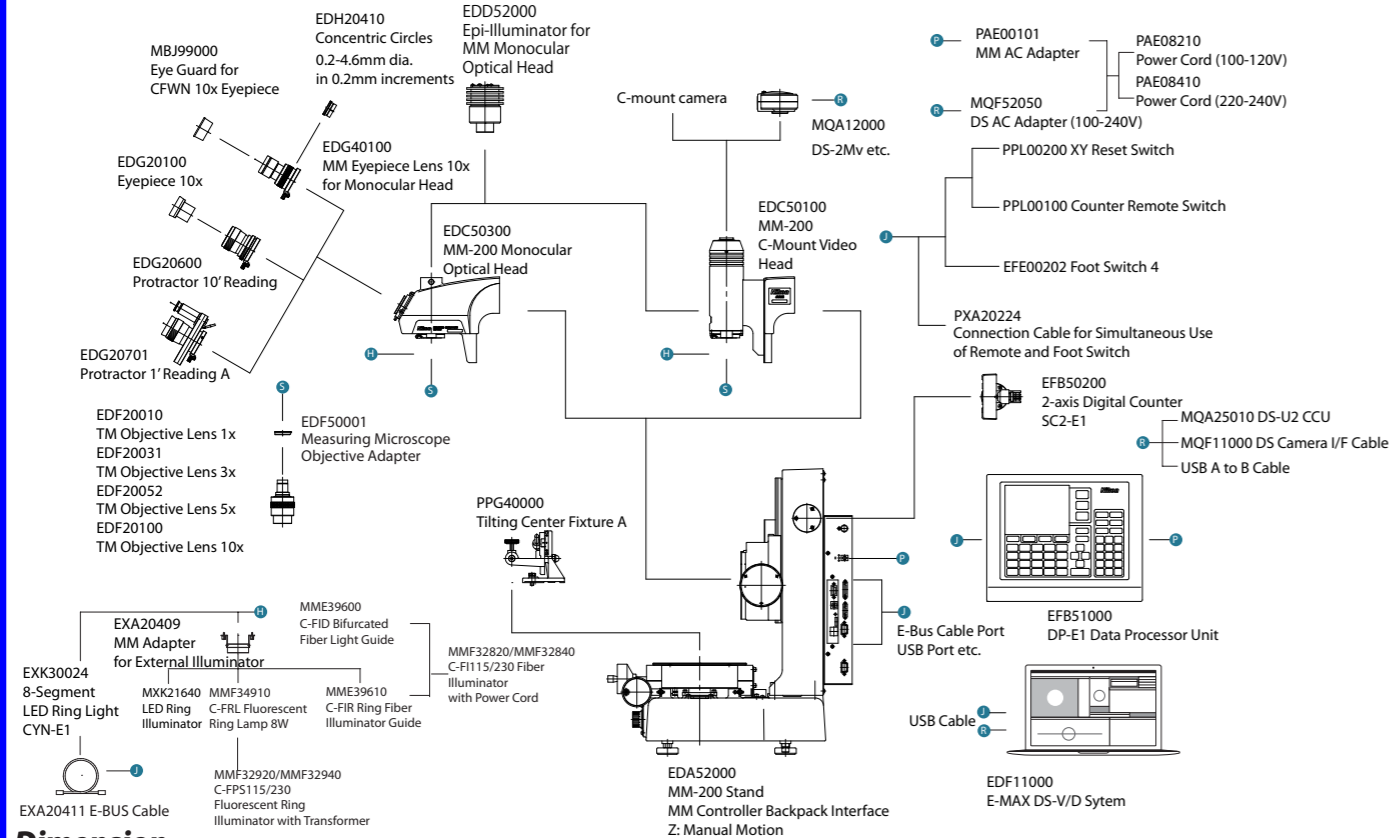
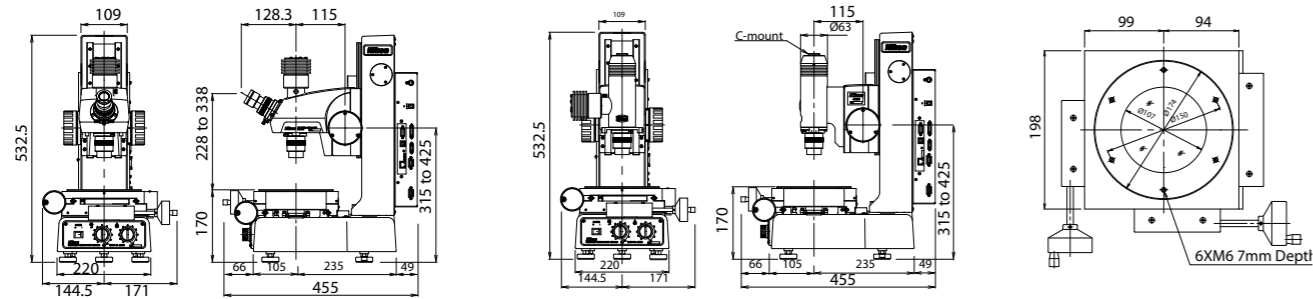


System Diagram



Dimension



Specifications and equipment are subject to change without any notice or obligation on the part of the manufacturer. January 2009 ©2009 NIKON CORPORATION

WARNING TO ENSURE CORRECT USAGE, READ THE CORRESPONDING MANUALS CAREFULLY BEFORE USING YOUR EQUIPMENT.



ISO/IEC 17025 Certified
Nikon Corporation Instruments Company has been certified as an ISO/IEC 17025 accredited calibration laboratory for projectors and measuring microscopes by the Japan Accreditation Board for Conformity Assessment.
Date of accreditation: September 8, 2006
Scope of accreditation: X/Y-axis indication accuracy of measuring microscopes
X/Y-axis indication accuracy and magnification accuracy of projectors
CS 1st Engineering Section, Sales Department, Industrial Instruments Division
Customer's laboratory (field service)
Accredited section: Calibration site:

NIKON CORPORATION
Instruments Company, Ohi Plant
6-3, Nishi-Ohi 1-Chome, Shinagawa-Ku, Tokyo 140-8601, Japan
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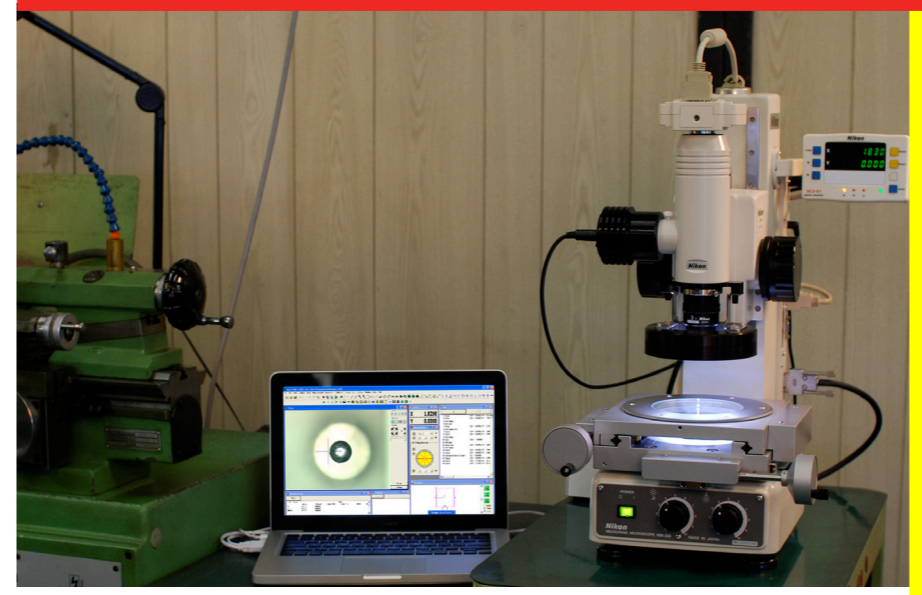
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Digital Imaging & Metrology

Nikon Measuring Microscope MM-200



- Precise and Easy to Use**
 - Quick and Accurate Non-Contact Optical Measurement
- Compact and Lightweight Design**
 - Smaller Footprint Ideal for Machine Tooling Shops / Inspection Rooms
- Digital Readout and Data Processing**
 - Geometric Dimensioning & Tolerancing
- Digital Video Camera Head**
 - Automated Edge Detection with E-MAX System
- White LED Lighting Sources**
 - Long Life & Environmental Friendly
- Digital Templates**
 - Threads/Gears/Concentric Circle Templates for Video Inspection

Compact, Light, Precise and Easy to Use Measuring Microscope for Dimensioning & Tolerancing

The new Nikon Measuring Microscope MM-200 uniquely designed for all machining engineers and inspectors, who require precision.

Compact, space-saving body weighing 40kg

The MM-200 features a space-saving design with a footprint of just A3 Paper size, namely 420 x 297 mm (main body with monocular eyepiece tube). The affordable Measuring Microscope is now available from Nikon.

Monocular Eyepiece Head / C-Mount Video Head

For those who prefer to measure with their own eye, the monocular eyepiece tube model is available, while the C-Mount Video Head model provides easy video monitoring.

MM Controller Backpack Interface for Digital Readout and Data Processing

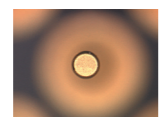
The MM-200 has the backpack control interface unit for XY Stage Scale readout, Illumination Control, Communication Ports to external devices such as PC, Digital Readout and so on. Simply apply the Data Processing Unit, the DP-EI to complicated GD&T measurements. The E-MAX DS-V system allows easy to use advanced Video Edge Detection Technologies. The Popular digital readouts such as Metronics Quadra-Chek300 is also available. White LED Lighting Sources

The built-in Episcopic and Diascopic Light sources are all long life white LED. The optional LED ring lights will give you the enhanced edge observation by oblique illumination angle.

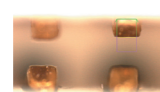
Applications

- Small Size Die & Mold
- Drill Bits
- Inserts
- Fine Pitch Connector
- Medical Devices
- Watch Parts
- Gears
- And so on...

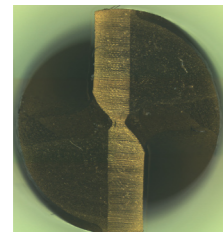
PGA - Insertion Pin



Connector - Housing Inside



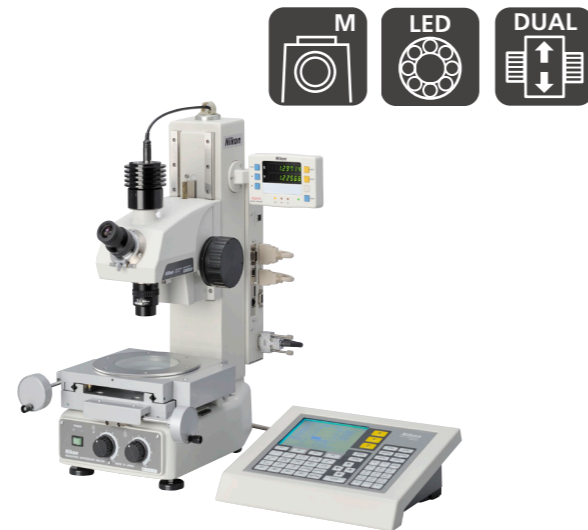
Drill Bits



Plastic Gear Teeth with Smaller Module



The image was generated by optional EDF/ Stitching Express software



MM-200 with Monocular Eyepiece Tube and DP-EI



MM-200 with C-Mount Video Head and E-MAX DS-V



Your selections of Digital Readout/Data Processing System & Optional Accessories expand the measurement ability

Data Processing Unit DP-EI

The DP-EI Data Processor is compact, yet easy to use for quick measurements and data processing. The DP-EI's seamless interface to a PC platform, makes it easy to perform computations and management of your data.



Digital Readouts

The MM-200 can be used with Metronics Quadra-Chek and other 3rd-party digital readouts for Geometric Dimensioning & Tolerancing.

Quadra-Chek is a trademark of Metronics Inc.



QC300 with VED



QC200

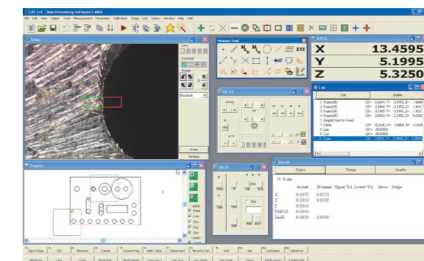
Optional 8 Segment LED Lighting Sources

The built-in Episcopic and Diascopic Light sources are all long life white LED. The optional LED ring lights will give you the enhanced edge observation by oblique illumination angle.



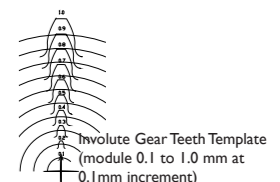
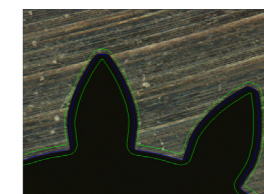
Data Processing Software E-MAX

In combination with Nikon's digital still camera, the DS-2Mv, the new E-MAX series software provides state-of-the-art image processing technology. Automated edge detection with sub-pixel processing enables more precise and repeatable measurement. Effectively used in conjunction with the MM-200, the new E-MAX series software provides the user with various advanced measurements and processing functions, ranging from two-dimensional data processing and image measurements, to data storage.



Digital Templates (for E-MAX DS-V System)

A Tradition of Tool Maker's Microscope has been revived. The newly prepared digital templates for Concentric Patterns, Threads, and Involute Gear Teeth with different modules made from 2D CAD data enable you to make quick Go/No-Go comparison inspection as well as digital image archiving.



Involute Gear Teeth Template (module 0.1 to 1.0 mm at 0.1mm increment)

Tilting Fixture

The tilting center fixture is used for fixing of cylindrical parts such as drills, and medical devices.



Main Specifications

TYPE	Monocular Eyepiece Tube Type	C-Mount Video Head Type
Optical Head	MM-200 Monocular Optical Head	C-Mount Video Head for MM-200
XYZ Stroke	50mm X 50mm X 110mm	
Stage Accuracy	2.5 + L/50 μm (with LEC), 3 + L/50 μm (L=Measurement Length in mm)	
Scale Resolution	0.01/0.1(default)/1/10 μm	
Max. Loading Weight	2 kg for Guaranteed Accuracy / 5 kg for Operation	
Magnification Accuracy	0.1%	
Objective Lenses (W.D.)	Standard: 3x (75.5mm) Optional 1x (79mm), 5X (64mm), 10X (48mm)	
Light Sources	Standard: Diascopic/Episcopic (White LED), Optional: 8-Segmented Ring Light (White LED)	
Dimension & Weight	316 x 455 x 533 (W x D x H), 40 kg	
Input Voltage Range	100 - 240 V (Max. 1.8 A)	