Digital Imaging & Vision Processing

The use of a Nikon microscope digital camera and E-Max software will streamline your workflow from observation and capture, to the storage of high-definition digital images of your workpieces.

MM Controller Backpack Interface

Illumination, X/Y stage and Z data can be connected to the MM Controller as an interface to an external computer running E-Max software for data processing and system control.

New 12x8 Stage for Large Workpieces

(MM-800 only)

An enhanced body design using Computer Aided Engineering (CAE) for stress analysis enables the mounting of a larger stage to accommodate larger workpieces. A 300 x 200mm (12" x 8") stroke stage can be mounted to the MM-800.

Improved Interface with Data Processor and Software

Interfacing to data processors and PC software has been greatly improved to include comprehensive support throughout the entire measurement process, from image capture and measurements, to analysis and data storage.

Data Processor DP-E1

The DP-E1 Data Processor is compact, yet easy to use. For quick measurements and data processing you can place the read-out display near the eyepiece while the control pad is placed at your fingertips. The DP-E1's seamless interface to a PC platform makes it easy to perform computations and management of your measurement results.

Data Processing Software E-MAX Series

Digital image measuring performance of the E-MAX software has been upgraded. Combined with Nikon's digital camera and measuring microscope, the system achieves digital image measurements with precision never before possible.

DP-E1

3rd-party DRO Connectable (S Models)

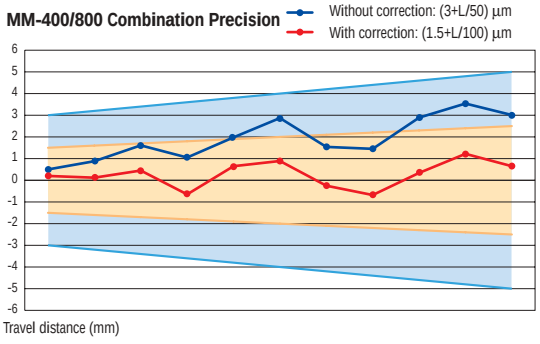
The MM-400S, SL and MM-800S, SL models were created for use with Metronics Quadra-Chek and other 3rd-party digital read-outs. They offer an economical alternative if non-Nikon data processors are used.

※ QuadraChek is a trademark of Metronics Inc.

High-Precision Type (Factory Option)

The design of the MM-400/800 series measuring microscope has been revamped to provide users with increased flexibility in choosing modules for system configurations. You can configure the optimum system according to your needs, including an ultrahigh-precision system boasting precision as high as 1.5+L/100µm (L: measurement length in mm) with combination correction. Also, since the construction of the entire microscope has improved rigidity, the system exhibits excellent reliability during measurements with configurations consisting of a digital camera and/or other accessories.

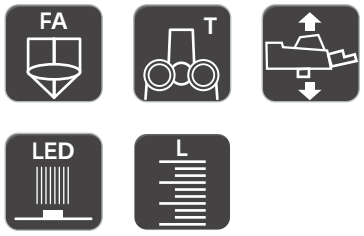
* For details on system configuration, contact Nikon.



LM Models 3-Axis and Z-Motorized Model

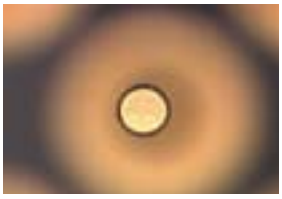
The LM models have a built-in motorized Z-axis scale, enabling accurate 3-axis measurements. In addition, the optional Focusing Aid uses a split prism to ensure Z-axis focusing accuracy and minimize measurement errors caused by the difference in the objective's depth of focus.

MM-800/LM



Configured with 10x6 stage, trinocular optical FA head

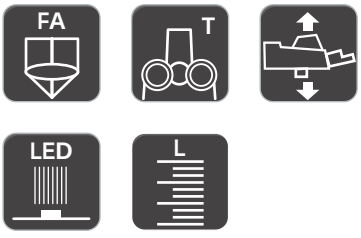
Connector - Housing Inside



PGA - Insertion Pin

Applications:
Dies & molds, Finely machined parts, Stamped parts, Injection molded parts, Medical devices

MM-400/LM



Configured with 6x4 stage, trinocular optical FA head

Specifications

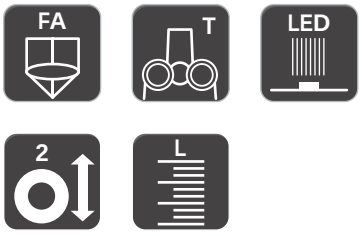
*TE2-PS100W power supply is required

Type		MM-800/LM	MM-400/LM
Z-axis movement		Motorized (max. speed: 10mm/sec)	
MM controller backpack interface		Built-in	
Optical head		Monocular optical head, Trinocular optical head, Trinocular optical FA head	
Z-axis linear scale		Built-in	
Eyepiece		CFWN10x (Field No. 20)	
Objective		Measuring microscope objectives	
Stage		12x8, 10x6, 8x6	6x4, 4x4, O3L, 2x2
Light source	Diascopic	LED diascopic illuminator (standard), 12V-50W halogen light source (option)*	
	Episcopic	LED episcopic illuminator	
Max. workpiece height		200mm	150mm
Dimensions (W x D x H)/weight		385 x 785 x 725mm/approx. 65kg	300 x 600 x 638mm/approx. 50kg

With a built-in Z-axis scale, this type is the basic standard for Nikon's measuring microscope series. Various models are available—with or without Focusing Aid, monocular or trinocular optical head. You can select the best one according to your measuring range, use and budget. The SL model is recommended for 3rd-party (non-Nikon) digital read-outs and therefore does not include the MM controller that interfaces with the Nikon DRO.

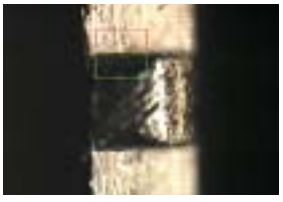
Plastic Gear Teeth with Smaller Module

MM-800/L
MM-800/SL with 3rd-party DRO



Configured with 8x6 stage, trinocular optical FA head

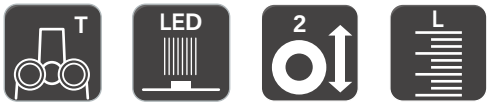
Applications:
Dies & molds, Finely machined parts, Stamped parts, Injection molded parts, Medical devices



Black Injection Molding Parts - Connector

Configured with 4x4 stage, trinocular optical head

MM-400/L
MM-400/SL with 3rd-party DRO



Specifications

*TE2-PS100W power supply is required

Type		MM-800/L	MM-800/SL	MM-400/L	MM-400/SL
Z-axis movement		Manual (dual side coarse/fine focus knob)			
MM controller backpack interface		Built-in	—	Built-in	—
Optical head		Monocular optical head, Trinocular optical head, Trinocular optical FA head			
Z-axis linear scale		Built-in			
Eyepiece		CFWN10x (Field No. 20)			
Objective		Measuring microscope objectives			
Stage		12x8, 10x6, 8x6		6x4, 4x4, 03L, 2x2	
Light source	Diascopic	LED diascopic illuminator (standard), 12V-50W halogen light source (option)*			
	Episcopic	LED episcopic illuminator			
Max. workpiece height		200mm		150mm	
Dimensions (W x D x H)/weight		385 x 785 x 725mm/approx. 65kg		300 x 600 x 638mm/approx. 50kg	

MM-800/400/800S/400S (2-Axis Measurement Model)

These are the basic models in the MM-400/800 series. High in cost performance, these models are expressly designed for 2-axis (XY) applications. To meet your application and budget, various models are available—monocular or trinocular optical heads, plus 12x8 large stage or 2x2 small stage sizes are available. The 400S and 800S models are specifically for use with non-Nikon digital read-outs.

MM-800

Configured with 8x6 stage, trinocular optical head

Applications:
Dies & molds, Finely machined parts, Stamped parts, Injection molded parts, Medical devices

Configured with 2x2 stage, monocular optical head

MM-400

Specifications

*TE2-PS100W power supply is required

Type		MM-800	MM-400
Z-axis movement		Manual (dual side coarse/fine focus knob)	
MM controller backpack interface		Built-in	
Optical head		Monocular optical head, Trinocular optical head	
Z-axis linear scale		—	
Eyepiece		Dedicated 10x (Field No. 20)	
Objective		Measuring microscope objectives	
Stage		12x8, 10x6, 8x6	6x4, 4x4, O3L, 2x2
Light source	Diascopic	LED diascopic illuminator (standard), 12V-50W halogen light source (option)*	
	Episcopic	LED episcopic illuminator	
Max. workpiece height		200mm	150mm
Dimensions (W x D x H)/weight		385 x 785 x 725mm/approx. 65kg	300 x 600 x 638mm/approx. 50kg

MM-800/S with 3rd-party DRO

Configured with 8x6 stage, trinocular optical head, Quadra-Chek®300

Applications:
Stamped parts, Injection molded parts, Medical devices, Drills, Micro tooling, Automotive Components

MM-400/S with 3rd-party DRO

Configured with O3L stage, trinocular optical head, Quadra-Chek®200

Specifications

*TE2-PS100W power supply is required

Type		MM-800/S	MM-400/S
Z-axis movement		Manual (dual side coarse/fine focus knob)	
MM controller backpack interface		—	
Optical head		Monocular optical head, Trinocular optical head	
Z-axis linear scale		—	
Eyepiece		CFWN10x (Field No. 20)	
Objective		Measuring microscope objectives	
Stage		12x8, 10x6, 8x6	6x4, 4x4, O3L, 2x2
Light source	Diascopic	LED diascopic illuminator (standard), 12V-50W halogen light source (option)*	
	Episcopic	LED episcopic illuminator	
Max. workpiece height		200mm	150mm
Dimensions (W x D x H)/weight		385 x 785 x 725mm/approx. 65kg	300 x 600 x 638mm/approx. 50kg