Marking system for Microscopic field

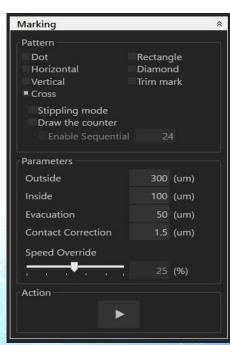
Pinpoint marker D-MARK

Effortlessly create precise markings on analytical samples through convenient controls.





- Compact design; A4 footprint (210mm x 297 mm)
- Quick and auto-marking with a diamond indenter.
- Extensive image mapping capabilities.
- Accurate detection of surface with a contact sensor.
- Wide selection of customizable marking shapes.
- Flexible parameter settings for sizing.
- Engraving options include dots, lines, and numbers.
- More cost-efficient than laser marking systems.
- Minimal damage and reduced dust emission.



Product Features

- ✓ This device is a tabletop marking system designed for ultra-precise marking on samples down to the micrometer scale.
- ✓ It easily transitions from observing micro-areas through the objective lens to marking with a diamond indenter, enabling automated creation of dots, lines, rectangles, and numbers.
- ✓ Offering minimal sample damage and reduced dust spread compared to laser markers, this system introduces a new approach with its compact design, ease of use, and affordability.

Specifications



[Workpiece Height Adjustment] Accommodates workpieces with a maximum thickness of 30mm.

[Sensor protection]
It safeguards the sensor by releasing load in the event of an emergency.



【Objective lens】
Up to two objective lenses can be mounted and used interchangeably



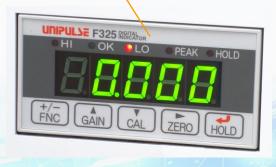
【Diamond Indenter】 Options of 136° and 90° are available and easily interchangeable.





[Sample Fixation]

Suction plate can be chosen to match the size of the sample that needs to be secured.



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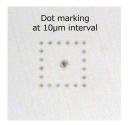
[Load Measurement Capability] Comes standard with a sensor adjustable from as low as 0.0005N.

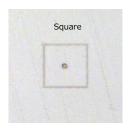
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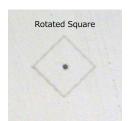
MicroSupport

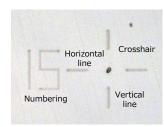
Standard Marking Patterns Area: 50µm, Target substrate: Glass substrate, Foreign object size ≈ 2-5µm

Includes Dots, Horizontal & Vertical Lines, Crosshairs, Squares, Rotated Squares, Trim Marks, and Numbering options.





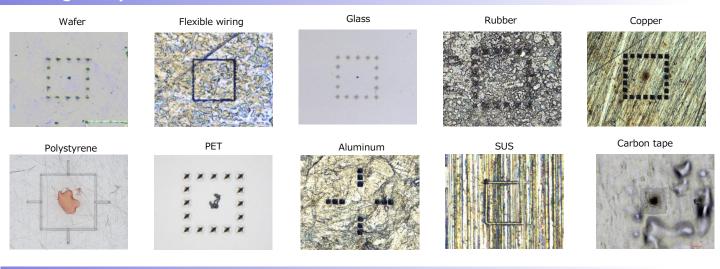






Settings possible for distances of $\geq 200 \mu m$ from the center.

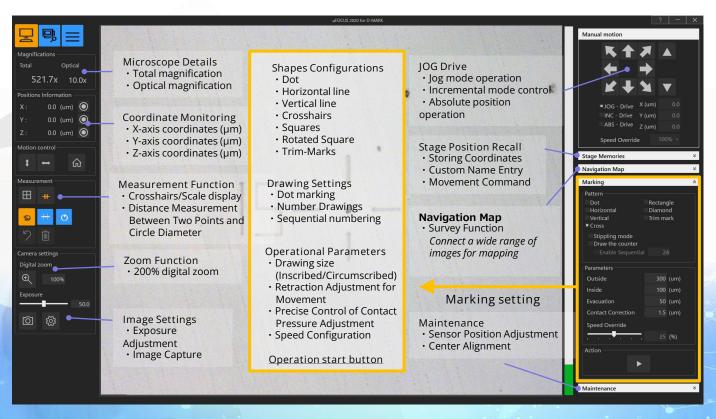
Marking example Available to mark on wafers/films of various materials such as Glass/Metal/Rubber.



Key Features of the Software

μFOCUS 2020 for D-MARK

Operating while viewing the display ensures minimal fatigue, even during extended work sessions.



Pinpoint marker D-MARK

MicroSupport

Product line-up

Specifications	Components	Model Number
Standard stage / Single lens type (136° indenter included)	1 - 1 3 4	DMARK-S20
Standard stage / Dual lens type (136° indenter included)	1 - 2 3 4	DMARK-D20
Long stroke stage / Single lens type (136° indenter included)	2-1 3 4	DMARK-S55
Long stroke stage / Dual lens type (136° indenter included)	2-2 3 4	DMARK-D55

1-1 (Single lens)

2-1 (Single lens)

2-2 (Dual lens)

**As for price information, please refer to price list.

4 Desktop PC









Product specifications

COMMON FEATURES

Making Precision	Difference between commanded position and actual position less than 5µm
Indenter material	Crystal diamond
Indenter Shape	136°: square pyramid with opposing angles of 136° (ideal for glass, wafers, etc.)
*1	90°: square pyramid with opposing angles of 90° (ideal for films, etc.) **Recommended for dot marking
Sample Thickness	Suitable for film-like materials up to 30mm
Marking Variety	Dots, Crosshairs, Horizontal and Vertical Lines, Square, Rotated Square, Trim Marks, and Numbering options
Marking Size	Dot Size: 5μm Minimum Line Width: ≥5μm

SPECIFICATIONS BY MODEL

Model No.	DMARK-S20	DMARK-D20	DMARK-S55	DMARK-D55	
Stroke	20mm left-right, 20mm forward-backward, 10mm up-down (0.1 µm resolution)		55mm left-right, 85mm forward-backward, 10mm up-down (0.1 µm resolution)		
Sample Size	≈5-50mm <u></u> %2		≥55mm		
Objective Lens	10×	10× / 20×	10×	10× / 20×	
Total Magnification	Magnification ranges from ≈ 520× (using 10× objective lens) to ≈1040× (using 20× objective lens). **An additional 200% magnification increase is achievable through the use of digital zoom.				
External Dimension	305×180×49 1mm	305×180×520 mm	435×394×500 mm	435×394×529 mm	
Weight	16kg	17kg	29kg	30kg	
Control System	Desktop PC (Windows10) / 1.3 million pixels USB camera / Controller Box				
Power Supply	AC100-240V 50/60Hz				
Others	One vacuum pump for securing samples through suction.				

X1: The diamond indenter can be chosen based on the sample material.

***2**: The stage adapter can be selected according to the sample size.

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