



# Video Digital Tool-maker Microscope

## □ VDTM series

VDTM series video digital toolmaker microscope is a photoelectric measuring system of high precision and efficiency. It is mainly applied in 2D measurement, sometimes in 3D as well with eyepiece gauge. The measurements of surface roughness, height, depth, steps, etc. are made simply by relative measuring method. VDTM is highly appreciated by manufacturers for its accurate measurement and inspection of objects, such as PCB, precision parts, ICs, magnetic heads, electronic components, etc.





## VDTM Series Specifications :

### Features:

1. VDTM series video toolmaker microscopes have many functions such as data gathering/displaying, image displaying/magnifying, data input/output.
2. Equipped with professional inspection color CCD camera and image measuring software greatly enhances image measurement performance, it make the operation of edge detection faster and more accurate.
3. Optional 2D Image measuring software (M2D-AT) is fully compatible with Windows XP.
4. VDTM can also connect to PC by RS232 interface on digital readout device. It can input and output the measured values directly.

Model	VDTM-1510 VDTM-1510S/D	VDTM-2010 VDTM-2010S/D	VDTM-2515 VDTM-2515S/D	VDTM-3020 VDTM-3020S/D
Metal Table's Size (mm)	354 x 228	404 x 228	450 x 280	500 x 330
Glass Table's Size (mm)	210 x 160	260 x 160	306 x 196	350 x 280
X/Y Travel (mm)	150 x 100	200 x 100	250 x 150	300 x 200
Z axis travel (mm)	150	150	200	200
Weight (kg)	100	110	135	140
Dimensions (mm)	540 x 667 x 850		800 x 675 x 920	
Z working range (mm)	150		200	
Indication Error of X/Y axis	$\leq (3 + L/75) \mu m$ ; L: measuring length (mm)			
X/Y/Z-axis resolution	0.0005 mm			

### ■ Eyepiece system and video system

	Eyepiece system	Video system
Objectives magnification	1X、3X(Std.)、5X、10X	1X、3X(Std.)、5X、10X
Eyepiece magnification	10X Single-lens or 10X Biocular (Option)	F Type: SONY, 1/2" CCD Camera G Type: 1/3" CCD Camera
Total magnification	10X ~ 100X	
Objectives aberration or CCD camera resolution	Total aberration error $\leq 0.08\%$ (including distortion)	640 x 480 pixels
Illumination light source	Transmission: 24V/20W halogon lamp Reflection: 12V LED ring lamp with laser point	
Video measuring software	NA	M2D-AT



**CARMAR TECHNOLOGY CO., LTD.**

CARMAR TECHNOLOGY CO.,LTD  
No.6, 23rd Road., Industrial Park,  
Taichung City 408, Taiwan (R.O.C.)  
TEL: 886-4-23592289  
FAX: 886-4-23598060  
E-mail: [carmar.tech@msa.hinet.net](mailto:carmar.tech@msa.hinet.net)  
<http://www.carmar-tech.com/>