

# SUB-MICRON TABLET MICROMETER

## USER MANUAL



ISO17025:2017



ISO 9001:2015



Item No	Range		Resolution	Accuracy	Repeat-ability	Measuring HUB	ON-line Graphic	Analog scale	Preset	Go/NoGo	Max/Min	Formula	Timer	Temp comp	Linear corr	Calibr date	Connect. status	Recharge batt	Memory	Wireless	USB	MODBUS	Color Display
	mm	inch																					
110180259	0-25	0-1"	0,0001 0.001 0.01	±1,0	0,5	•	•	•	•	•	•	•	•	•	•	•	•	•	Folders / 2000 val			Optional	Touchscreen 2,4"
110180509	25-50	1-2"		±1,3	0,5	•	•	•	•	•	•	•	•	•	•	•	•	•					
110180759	50-75	2-3"		±1,5	0,8	•	•	•	•	•	•	•	•	•	•	•	•	•					
110181009	75-100	3-4"		±1,8	0,8	•	•	•	•	•	•	•	•	•	•	•	•	•					
110181259	100-125	4-5"		±2,3	1,0	•	•	•	•	•	•	•	•	•	•	•	•	•					
110181509	125-150	5-6"		±2,5	1,0	•	•	•	•	•	•	•	•	•	•	•	•	•					
110181759	150-175	6-7"		±3,0	1,0	•	•	•	•	•	•	•	•	•	•	•	•	•					
110182009	175-200	7-8"		±3,0	1,0	•	•	•	•	•	•	•	•	•	•	•	•	•					
110182259	200-225	8-9"		±3,0	1,0	•	•	•	•	•	•	•	•	•	•	•	•	•					
110182509	225-250	9-10"		±3,0	1,0	•	•	•	•	•	•	•	•	•	•	•	•	•					
110182759	250-275	10-11"	±3,0	1,0	•	•	•	•	•	•	•	•	•	•	•	•	•						
110183009	275-300	11-12"	±3,0	1,0	•	•	•	•	•	•	•	•	•	•	•	•	•						
<b>NON-ROTATING TABLET MICROMETER</b>																							
110170259	0-25	0-1"	0,0001	±1,5	0,5	•	•	•	•	•	•	•	•	•	•	•	•						
110170509	25-50	1-2"		±2	0,5	•	•	•	•	•	•	•	•	•	•	•	•						
<b>DOUBLE RANGE TABLET MICROMETER</b>																							
110180519	0-50	0-2"	0,0001	±2,5	0,5	•	•	•	•	•	•	•	•	•	•	•	•						
110181019	50-100	2-4"		±2,5	0,8	•	•	•	•	•	•	•	•	•	•	•	•						

Parameters	
LED display	color 2,4 inch 320x240
Indication system	MICS 4.0
Power supply	Rechargeable Li-Pol battery 500 mAh
Charging port	micro-USB
Case material	Aluminium
Wireless data transfer	Long range / HID
USB data transfer	USB HID

## TECHNICAL DATA



**SWITCH ON DEVICE** - button push (1 sec)  
**SWITCH OFF DEVICE** - button push (3 sec)/ auto switch off  
**DATA TRANSFER** - programming throw menu

## MAIN INFO

**BUILT-IN BATTERY** - rechargeable Li-Pol battery

## DOWNLOAD APP

DOWNLOAD MDS APP FOR MICROTECH DEVICES  
 WIRELESS CONNECTION FROM [www.microtech.ua](http://www.microtech.ua),  
 GooglePlay & App Store



# DATA TRANSFER







**MICROTECH**

## 3 MODES OF DATA TRANSFER (USB + 2 WIRELESS MODES)

### WIRELESS CONNECTION TO MDS APP

WIRELESS data transfer to MICROTECH MDS app for Windows, Android, iOS

-  SAVING DATA TO XLS, CSV FORMATS
-  TRANSFER DATA TO CAD, SPC OR OTHER SOFTWARE
-  TRANSFER DATA TO EXCEL OR OTHER TABLE EDITORS
-  SAVING GRAPH



**FREE SOFTWARE**



**NO DONGLE**



### WIRELESS HID CONNECTION

### USB HID CONNECTION



**NO DONGLE**



WIRELESS HID and USB HID data transfer (like keyboard) direct to any customers app and system

-  TRANSFER DATA TO CAD, SPC OR OTHER SOFTWARE
-  TRANSFER DATA TO EXCEL OR OTHER TABLE EDITORS
-  TRANSFER DATA TO ANY BROWSER OR APP

## 7 WAYS HOW TO TRANSFER DATA TO PC OR TABLET

**TOUCHSCREEN TAP**

BY TIMER

**BUTTON PUSH**

FROM MEMORY

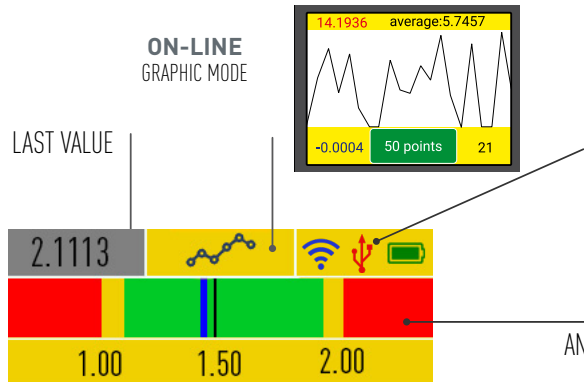
**SFCI FCTED FORCE**

IN MDS APP





# MAIN SCREEN



## CONNECTION STATUS

- WIRELESS DISCONNECTED
- WIRELESS CONNECTED
- WIRELESS HID CONNECTED
- USB HID DISCONNECTED
- USB HID CONNECTED

0 MENU 177

## MEMORY



STANDARD or FOLDER system can be activated throw MEMORY menu

For save measuring data to internal device memory touch data area on screen or button push. You can view saved data or send by WIRELESS or USB connection to Windows PC, Android or iOS It's possible to use Standard or Folders memory modes

FOLDERS SYSTEM

Stat	All
7	7
7	5
7	2

MEMORY 2000 VAL.

Stat	All
1:	0.0000
2:	1.2334
3:	1.2337
4:	1.2333
5:	1.2341

Stat All

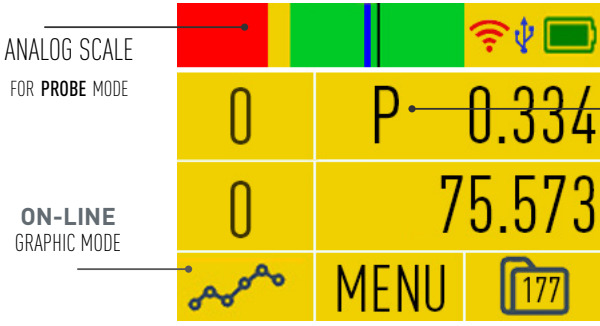
Delete or Send?

Del Send

Statistic

MAX:	+26.999
MIN:	8.8673
AVG:	+5.3213
D:	+26.863

# MAIN SCREEN on 2D mode



## 2D AND HUB MODE

- PROBE** - Saving data when Probe will reach value
- PROBE Auto** - Saving data when Probe will reach value with this value compensation
- 2D** - 2 axis data reading
- 2D Sync** - Synchronized 2 axis data reading

# FUNCTIONS



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## LIMITS mode GO/NOGO



**MAX** - NoGo more Upper limit  
**MIN** - NoGo less Lower limit  
**RANGE** - Go between Limits  
**NONE** - Analog scale active

## COLOR INDICATION LIMITS ON MAIN SCREEN Go NoGo

∇	2.000	Upper limit
∧	3.000	Lower limit
%	20	Yellow zone on analog scale
	SCALE	RES

## PEAK mode MAX/MIN



**DISABLE** - non active mode  
**ENABLE** - activating mode  
**REFRESH** - refresh peak value according timer

## INDICATION AND SAVING MAX OR MIN VALUES

Max/Min	
Enabled	MAX - indicating MAX measured value MIN - indicating MIN measured value
MAX	

## TIMER mode



## SAVING DATA TO MEMORY OR SENDING WIRELESS/USB BY TIMER

Timer	
0.000 sec	Select timer period
Reset	Reset to deactivate mode

## FORMULA mode



Formula	
$Ax^2+Bx+C$	Select FORMULA Type (Math, Radius or other)
Set Argv	Select arguments

## RESOLUTION selection



Resolution	
X.0000	Resolution selecting
mm	mm/inch conversion

## DISPLAY settings



Sleep OFF (15 s low brightness off, sleep off)  
 Sleep 15s (15 s low brightness on, sleep off)  
 Sleep ON (15 s low brightness on, sleep on)

Display	Display rotation 0°, 90°, 180°, 270°
Angle 270	
Sleep ON	Brightness level

## LINEAR error compensation



Re-calculation detail size to calibration conditions (20°C)

## Linear correction error's on device

O: 17.251	actual values
C: 17.258	correct values by up&down button
UP	confirm point correction
DN	RES

## TEMP compensation



Manual Temperature setting

Temp.com.	
Cu, Cu alloys	
27.5°C	RES

4 types of material for selection:

- Glass, Quartz
- Stainless steel
- Cuprum and alloys
- Aluminium and alloys



## WIRELESS data transfer



Reconnection button  
Wireless power regulation



**ON** - WIRELESS data transfer to MDS App for Android, iOS, Windows  
**HID**- WIRELESS HID direct transfer data to any App in Windows, MacOS, Linux, Android devices (like keyboard). Configure data format in USB sub-menu  
**2D-S** - Slave device on WIRELESS connection on HUB mode  
**2D-M** - Master device on WIRELESS connection on HUB mode

## USB OTG data transfer



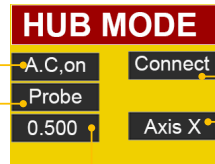
Connect USB cable to PC & Activate USB HID connection mode  
Select setting of data transfer  
Direct transfer data to any App in Windows, MacOS, Linux, Android devices  
Configuring data transfer Dot/Comma and Tab/Arrow Down/CR+LF

## HUB connection



**A.C.on** - Auto Connection active  
**A.C.off** - Auto Connection no active

**PROBE** -Saving data when Probe will reach value  
**PROBE Auto** - Saving data when Probe will reach value with this value compensation  
**2D** - 2 axis data reading  
**2D Sync**- Synchronized 2 axis data reading  
**Disable** - switch off modes

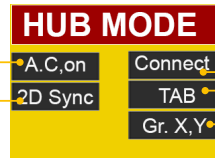


**HUB MODE**  
External Wireless device connection  
Axis priority selecting  
Setting PROBE limit value

## PROBE MODE

**A.C.on** - Auto Connection active  
**A.C.off** - Auto Connection no active

**PROBE** -Saving data when Probe will reach value  
**PROBE Auto** - Saving data when Probe will reach value with this value compensation  
**2D** - 2 axis data reading  
**2D Sync**- Synchronized 2 axis data reading  
**Disable** - switch off modes



**HUB MODE**  
External Wireless device connection  
Symbol between Axis  
Graphic mode indication setting

## 2D MODE

# FUNCTIONS



MICROTECH

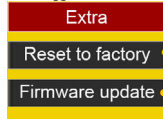
## LINK to app's



QR Link to MICROTECH web site page with MDS Software download

- Android, iOS, Windows versions
- Free and Pro versions
- Manuals

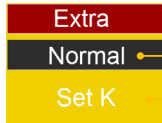
## RESET to Factory settings



Push 10 times to RESET device to factory settings

Push 10 times to FIRMWARE UPDATE

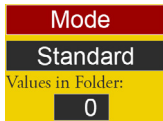
## EXTRA



Selecting normal or inverted axis mode (+/- value indication)

Coefficient setting (for distributor and calibration only)

## MEMORY manager setting



Activating STANDARD or FOLDER SYSTEM

Values in each Folder

FOLDERS SYSTEM

## CALIBRATION date info



Push for change calibration date info

## Device INFO



Information about device

- Firmware version
- MAC adress for WIRELESS connection

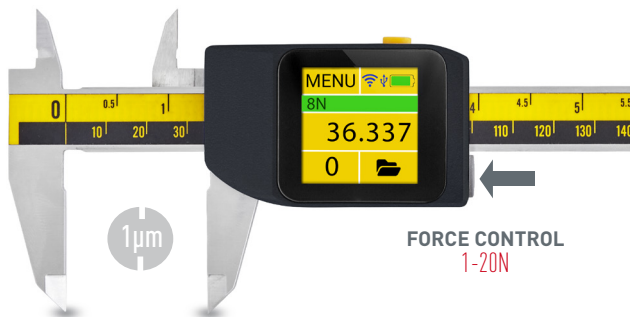


**MICROTECH**

# INDUSTRY 4.0 INSTRUMENTS



0,1µm



**FORCE CONTROL**  
1-20N



0,1µm



0,1µm



1µm

## MICROTECH

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Change without prior notice