MICROTECH



COMPUTERIZED RADIUS GAUGE

USER MANUAL

ISO17025:2017

ISO 9001:2015

www.microtech.ua

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SPECIFICATION

Item No	Radius			Resol.	Accu-racy	Base
	Range		Type			
	mm	inch		µm	%	mm
1250511017	5-60	0,2-1,2"	internal & external	1	0,4-1	10
1250511007	40-1200	2-48"				40
1250511117	250-7500	10-300"				200
1250511127	500-15000	20-600"				300
RADIUS SET'S						
1250512007	5-2000	0,2-80"	internal & external	1	0,4-1	10,30,60,100
1250513007	5-4000	0,2-160"				10,30,60,100,200
1250515007	40-7500	2-300"				40, 200
1250516007	40-15000	2-600"				40, 300
1250517007	5-15000	0,2-600"				10, 40, 300

TECHNICAL DATA

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

MAIN INFO



SWITCH ON DEVICE - button push (1 sec)

SWITCH OFF DEVICE - button push (3 sec)/ auto switch off

DATA TRANSFER - programming throw menu

BUILT-IN BATTERY - rechargeable Li-Pol battery

DOWNLOAD APP

DOWNLOAD MDS APP FOR MICROTECH DEVICES
WIRELESS CONNECTION FROM www.microtech.ua,
GooglePlay & App Store

Download Windows App

Download on the App Store

GET IT ON Google play

MAIN INFO

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- Install requested Radius anvils from the set, according recomendation in Table
- For recharging indicator (Li-Pol rechargeable battery) connect it with standard USB cable to charger device
- Turn on instrument by pressing ON button (1 sec).
- Check that activating **Radius_AUTO** mode in FORMULA menu



- If you use interchangeable anvils - install A and C coefficient from Table
- For **ZERO** setting put RADIUS gauge to the surface plate and press the 0 button on Touchscreen.
- You can measuring Internal & External radiuses in both direction
- Save measuring data to internal indicator memory with touch data on screen or by button push (necessery activating throw menu). You can view saved data throw menu or send throw Wireless connection to Windows PC, Android or iOS devices.

COEFFICIENTS

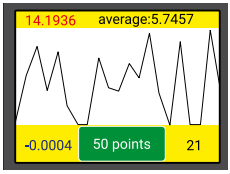
Probe lenght	Optimal measuring range	Coefficient in Radius formula		
		A	B	C
mm	mm			
10	5-60	10	0	2,5
40	40-1200	40	0	6
200	250-7500	200	0	8
300	500-15000	300	0	8

COEFFICIENTS FOR SETS

Probe lenght	Optimal measuring range		Coefficient in Radius2 formula		
	External	Internal	A	B	C
mm	mm	mm			
10	5-13	6-15	10	0	3
20	10-30	13-30	20	0	3
30	20-100	25-100	30	0	3
60	90-300	90-300	60	0	3
100	250-2050	250-2000	100	0	3

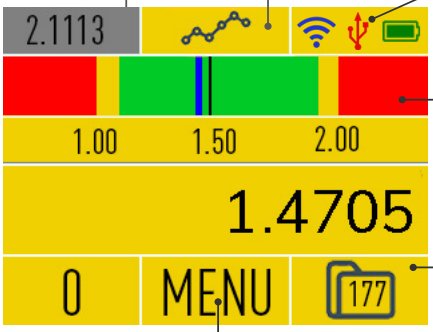
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MAIN SCREEN



ON-LINE
GRAPHIC MODE

LAST VALUE



CONNECTION STATUS

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

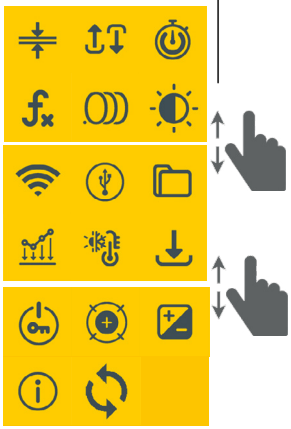
ANALOG SCALE

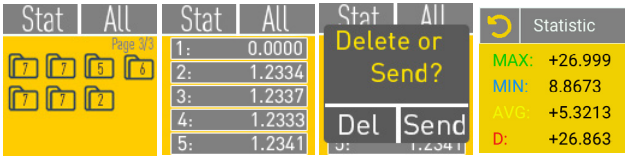
MEMORY



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

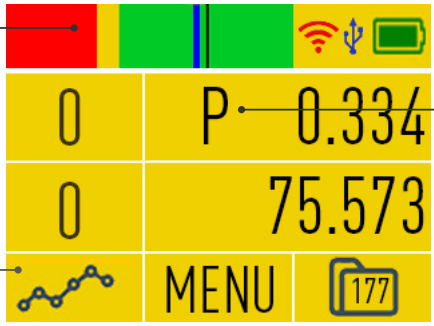




FOLDERS SYSTEM | MEMORY 2000 VAL. | MEMORY EXPORT | STATISTIC

MAIN SCREEN on 2D mode

ANALOG SCALE
FOR **PROBE** MODE



2D AND **HUB** MODE

ON-LINE
GRAPHIC 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
SCALE - Analog scale active

COLOR INDICATION LIMITS ON MAIN SCREEN Go NoGo

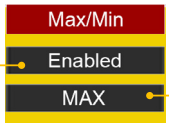


Upper limit
Lower limit
Yellow zone on analog scale

PEAK mode MAX/MIN/MODULE/RANGE



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



MAX - indicating MAX measured value
MIN - indicating MIN measured value
MODULE - indicating MAX module
RANGE - indicating deviation between MAX and MIN

TIMER mode



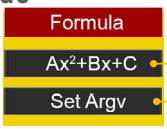
SAVING DATA TO MEMORY OR SENDING WIRELESS/USB BY TIMER



Select timer period
Reset to disactivate mode

FORMULA mode





Select FORMULA Type (Math, Radius or other)
Select arguments

RESOLUTION selection





Resolution selecting
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 rotation 0°, 90°, 180°, 270°
Brightness level

LINEAR error compensation



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

Linear correction error's on device



actual values
correct values by up&down button
confirm point correction

TEMP compensation



Manual Temperature setting



4 types of material for selection:
- Glass, Quartz
- Stainless steel
- Cuprum and alloys
- Alluminium and alloys

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FUNCTIONS

WIRELESS data transfer



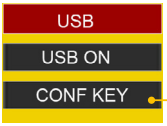


Recconection button
Wireless power regulation

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





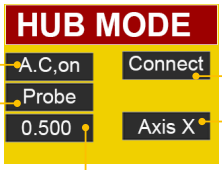
Connect USB cable to PC & Activate USB HID connection mode
Select setting of data transfer
Direct transfer data to any App in Windows, MacOS, Linux, Android devices
Configurating data transfer Dot/Comma and Tab/Arrow Down/CR+LF

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

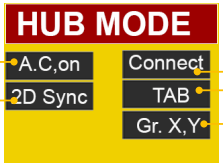
PROBE MODE



External Wireless device conneciton
Axis priority selecting
Setting PROBE limit value

2D 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



External Wireless device conneciton
Symbol between Axis
Graphic mode indication setting

FUNCTIONS

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LINK to app's

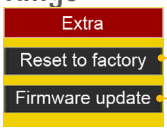
QR Link to MICROTECH web site page
with MDS Software download
- Android, iOS, Windows versions
- Free and Pro versions
- Manuals

Download Windows App

Download on the App Store

GET IT ON Google play

RESET to Factory settings



Push 10 times to RESET device to factory settings

Push 10 times to FIRMWARE UPDATE

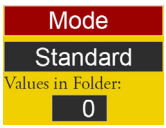
EXTRA

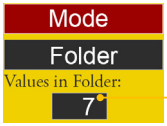


Selecting normal or inverted axis mode (+/- value indication)

Coefficient setting (for distributor and calibration only)

MEMORY manager setting





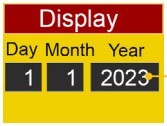
Activating STANDARD
or FOLDER SYSTEM

Values in each Folder



FOLDERS SYSTEM

CALIBRATION date info



Push for change calibration date info

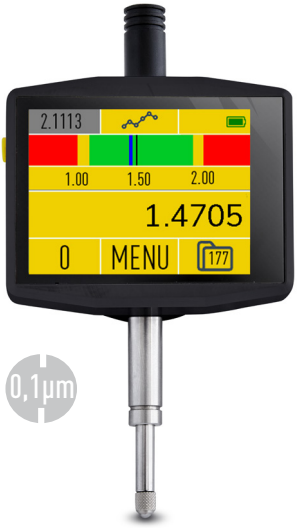
Device INFO

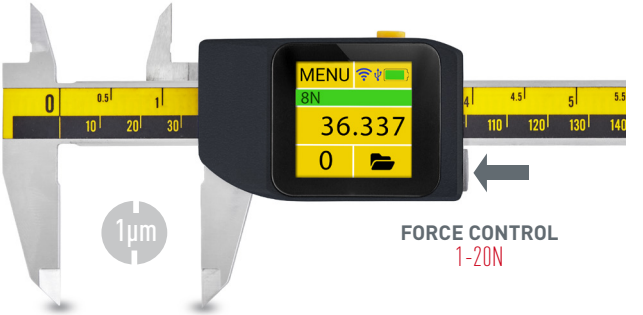


Information about device
- Firmware version
- MAC adress for WIRELESS connection

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INDUSTRY 4.0 INSTRUMENTS





FORCE CONTROL
1-20N







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