

SUB-MICRON COMPUTERIZED GAUGE FOR INTERNAL MEASURING USER MANUAL





Item No	Range	Resolution	Accuracy	Functions	Data output	
					USB	Wireless
134102505	5-25	0,0002	±0,020	Error comp.Temp.comp Preset. Memory Max/ Min Limits	+	max 50 m
134103005	10-30	0,0002	±0,020		+	max 50 m
134104005	20-40	0,0002	±0,020		+	max 50 m
134105005	30-50	0,0002	±0,020		+	max 50 m
134106005	40-60	0,0002	±0,020		+	max 50 m





Parameters	
LED display	color 1,54 inch
Resolution	240x240
Indication system	MICS 3.0
Power supply	Rechargeable Li-Pol battery
Battery capacity	450-800 mAh (depends of device)
Charging port	micro-USB
Case material	Aluminium
Buttons	Switch (Multifunctional), Reset
Wireless data transfer	up to 50m on open area

CHARGING



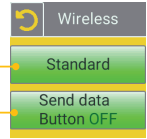
BUILT-IN BATTERY - rechargeable Li-Pol battery

For charging connect USB cable
Charging process indicating
on Battery status
(switch on device)



Activate WIRELESS data transfer in WIRELESS menu

Switch on Wireless data transmission
Activating multifunctional button to save value to memory or send data by touchscreen or button push



Connect instrument with MICS indication system to Tablet or PC

Send data to Tablet or PC:

- by Touchscreen
- by Multifunctional button push (activated in Wireless menu)
- by Timer (activated in Timer menu)
- from Internal Memory

MEMORY

For save measuring data to internal caliper's memory touch data area on screen or short button push. You can view saved data through menu or send Wireless connection to Windows PC, Android or iOS devices.

Basic STATISTIC functions:

- MAX - maximum saved value
- MIN - minimum saved value
- AVG - average value
- D - variance VAR(x)

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

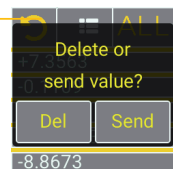
Saved values

Each value can be Deleted or Send to application

Value
+7.3563
-0.1109
+1.2293
+26.9993
-8.8673

Button ALL select all values

All values can be Deleted or Send to application



MEMORY settings

Memory sub-menu



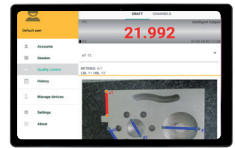
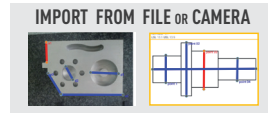
Selecting Standard mode or No saving data to internal memory



WIRELESS CONNECTION



USB-DONGLE



Windows



iOS



ANDROID



DOWNLOAD



DOWNLOAD



DOWNLOAD



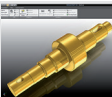
SAVING DATA TO XLS. CSV FORMATS



SAVING DATA TO XLS. CSV FORMATS



SAVING DATA TO XLS. CSV FORMATS



TRANSFER DATA TO CAD, SPC OR OTHER SOFTWARE



SAVING GRAPH



SAVING GRAPH



TRANSFER DATA TO EXCEL OR OTHER TABLE EDITORS



VOICE MODE



VOICE MODE

DATA TRANSFER DISTANCE FOR INTELLIGENT INSTRUMENTS

- All MICROTECH Intelligent instruments has internal memory. You can collect data to memory and when it will be necessary transfer all data to the peripheral device with no data loosing.
- It's possible transfer data, like in Wireless instruments up to 15 m or up 50 m with external antenna
- USB port can be used to transfer data directly to Windows PC



QUALITY CONTROL RESULTS



MENU NAVIGATION



USE TOUCHSCREEN TO OPERATE MENU

MENU button **MENU** Battery level

Colour can be changed according function **-0.0000** Actual value

Zero setting **0** Memory

MEMORY WITH STATISTIC

		ALL		Statistic
+7.3563			MAX:	+26.999
-0.1109			MIN:	8.8673
+1.2293				+5.3213
+26.9993			D:	+26.863
-8.8673				

MENU CONFIGURATION



MAIN MENU

LIMITS
color Go/NoGo

Max/Min

Enable

Go/NoGo

MAX/MIN
indicating max or min value

FORMULA MODE
 Ax^2+Bx+C

Formula

$Ax+Bx+C$

Go/NoGo

FORMULA MODE
 Ax^2+Bx+C

Timer

+000 sec.

RESET

ERROR COMPENSATION
mathematical correction

0.8970

0.8920

OK

RESET

Temp.comp.

Glass, Metal
Solid alloys, Mo

+00.00

TEMPERATURE COMPENSATION
manual correction

Resolution

X.0000

Millimeters

RESOLUTION
selected up to 0.0001mm

Extra

Axis Mode
Normal

CONNECT

WIRELESS
modes of data transmission

Wireless

Standard

Send data
Button OFF

Mode OFF

UART OFF

Keypad ON

ENABLE

USB
USB connection configuration

Device

PIN

RESET

DEVICE SETTING
pin, reset

Display

Angle 180

Sleep OFF

MEMORY SETTING

Mode

Standard

Link to software

SOFTWARE
link to download app

Calibration

DAY MONTH YEAR

01 01 2020

CHANGE

CALIBRATION DATE

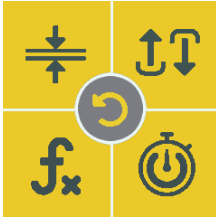
MICROTECH

www.microtech.us

COMP.CALIPER 1

FW: 3.0.5

MAC: 12345



LIMITS GO/NOGO

MENU SETTING

- MAX value: +000.000
- MIN value: +000.000
- RANGE: zero values

Colour indication limits

- MAX - NoGo more MAX value
- MIN - NoGo less MIN value
- RANGE - Go between MIN & MAX
- NONE - disactivating mode

MAIN SCREEN INDICATION

MENU		0	mm
	-10.005	0	mm
		0	mm

NoGo **Go**

MAX/MIN

MENU SETTING

- Max/Min: Enable

Indication and saving MAX or MIN values

- ENABLE - activating mode
- MAX - indicating MAX measured value
- MIN - indicating MIN measured value

MAIN SCREEN INDICATION

MENU		MENU	
	-2.9184		7.2241
0		0	

MIN **MAX**

FORMULA

MENU SETTING

- Formula: Ax^2+Bx+C
- A: +000.000
- B: +001.000
- C: +000.000
- RESET: Reset to zero arguments

FORMULA Ax^2+Bx+C

EXAMPLE OF FORMULA USING

Standard measuring	A=0, B=1, C=0
PRESET 50mm	A=0, B=1, C=50
Value magnification x3	A=0, B=3, C=0
Square value	A=1, B=0, C=0

TIMER

MENU SETTING

- Timer: +000 sec.
- RESET: Reset to disactivate mode

Saving data to memory or sending Wireless by Timer

Confirm reset?

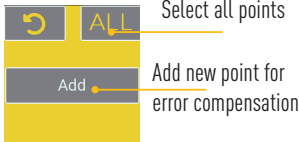
Yes No



MATHEMATICAL ERROR COMPENSATION

MENU SETTING

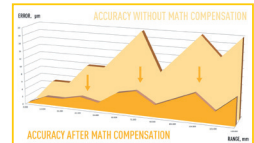
Mathematical correction points with big error to normal values



actual values

correct values by up&down button

confirm point correction



use gauge blocks or measuring machine for points correction

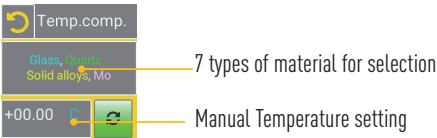
TEMPERATURE COMPENSATION

MENU SETTING

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

7 types of material:

- glass, quartz, solid alloys
- granite, graphite
- Fe, Ni, Fe alloys
- stainless steel
- cooper, Cu alloys
- aluminium, al alloys
- acrylic sheet



7 types of material for selection

Manual Temperature setting

RESOLUTION

MENU SETTING



Resolution selecting

mm/inch conversion

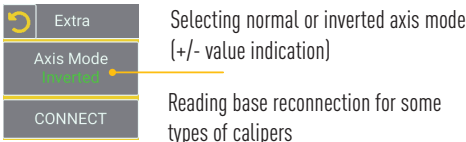
MAIN SCREEN INDICATION

+8.0608

Selecting resolution of value on main screen and memory

EXTRA (Axis mode)

MENU SETTING



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

Reading base reconnection for some types of calipers



WIRELESS CONNECTION

MENU SETTING Activating or deactivating wireless data transfer


Wireless

Standard

Send data Button OFF

Switch on Wireless data transmission

Activating multifunctional button to save value to memory or send data by touchscreen or button push



USB CONNECTION

MENU SETTING USB connection mode under construction

Mode OFF

UART OFF

Keypad ON

CONFIG

Configure

Trail symbol CR+LF

Devicer Dot

PIN & RESET

MENU SETTING Activating PIN to device setting **RESET** to factory settings

Device

PIN RESET

1	2	3	4
5	6	7	8
9	0	<	✓

Device

Confirm reset?

Yes No

DISPLAY SETTING

MENU SETTING DISPLAY ROTATION, BRIGHTNESS, SLEEPING MODE

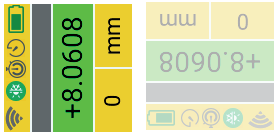
Display

Angle 180

Sleep ON

Display rotation 0°, 90°, 180°, 270°

- 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)

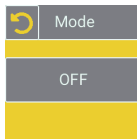
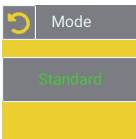




MEMORY SETTINGS

MENU SETTING

Activating or disactivating saving values to memory



Standard - saving values to memory
OFF - disable saving to memory

Mode	ALL
	+7.3563
	+0.1109
	+1.2293
	+26.9993
	-8.8673

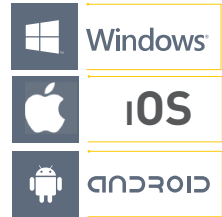


LINK TO SOFTWARE

MENU SETTING



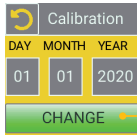
QR Link to MICROTECH web site page with MDS Software download
- Android, iOS, Windows versions
- Free and Pro versions
- Manuals



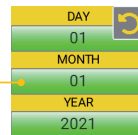
CALIBRATION DATE

MENU SETTING

Calibration date info

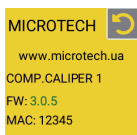


Push for change date info



DEVICE INFO

MENU SETTING



Information about device
- device name
- firmware version
- MAC adress for easy connection





MICROTECH

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