



SUB-MICRON INTELLIGENT COMPUTERIZED MICROMETER USER MANUAL





Item No	Range	Resolution	Accuracy	Protection class	Functions	Data output	
	mm	mm	mm			USB	Wireless
110180258	0-25	0,0001	±0,0015	IP-65	Error & Temp comp. Preset. Memory Max/Min Limits	+	max 50m
110180508	25-50	0,0001	±0,0015	IP-65		+	max 50m
110180758	50-75	0,0001	±0,0020	IP-65		+	max 50m
110181008	75-100	0,0001	±0,0020	IP-65		+	max 50m
110181258	100-125	0,0001	±0,0030	IP-65		+	max 50m
110181508	125-150	0,0001	±0,0030	IP-65		+	max 50m
110181758	150-175	0,0001	±0,0035	IP-65		+	max 50m
110182008	175-200	0,0001	±0,0035	IP-65		+	max 50m
110182258	200-225	0,0001	±0,0040	IP-65		+	max 50m
110182508	225-250	0,0001	±0,0040	IP-65		+	max 50m
110182758	250-275	0,0001	±0,0040	IP-65		+	max 50m
110183008	275-300	0,0001	±0,0040	IP-65		+	max 50m

Parameters	
LED display	color 1,5 inch
Power supply	Rechargeable Li-Pol battery
Lifetime	>80h (Medium brightness)
Charging port	micro-USB
Case material	Aluminium
Buttons	Switch, Reset
Wireless data transfer	10m without external antenna 50m with external antenna (from set)

**PRECISION MEASUREMENTS**

MICROTECH computerized micrometer with 0.1 resolution can be used for high precision measurements in manufacturing, automotive medical industry and for calibration

**COLOR GO/NOGO INDICATION**

Easy and quick limits control.
It's possible setup max and min value throw menu.
Color indication reduce possibility of error during control

**INTERNAL MEMORY**

Computerized micrometer has memory manger with possibility saving data to folders. Separate Data's or Folders can be transfer Wireless to MICROTECH Software (Windows, Android,iOS)

**FORMULA MODE**

In Formula mode we use Ax^2+Bx+C

Main using of this function is:

- Preset function

- Magnification of measured value

For customers request Formula can be updated

**ERROR COMPENSATION**

It's possible to make mathematical error compensation. Just re-calibrate micrometer with gauge block set and save results. Micrometer will indicate measuring results include re-calibration.

**TEMPERATURE COMPENSATION**

Temperature compensation function gives possibility recalculate details sizes with high or low temperatures to normal (20C conditions). Available recalculation for 7 materials

SWITCH ON DEVICE - button push (1 sec)

SWITCH OFF DEVICE - auto switch off (configuring throw DISPLAY SETTING menu)

- button push (3 sec)



Clean the oil from the measuring surfaces of micrometer by cloth.

Turn on micrometer by pressing SWITCH ON button.

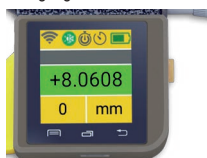
Check the setting display to zero. Contact with each other (or with setting gauge) measuring surfaces of the anvil and the spindle, using the ratchet and take a measurement.

Rotation the micrometer screw in the direction of convergence measuring surfaces using the ratchet.

For zero setting, press the ZERO button on Touchscreen.

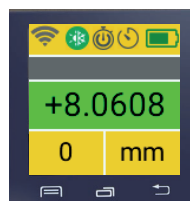
CHARGING

For charging connect USB cable



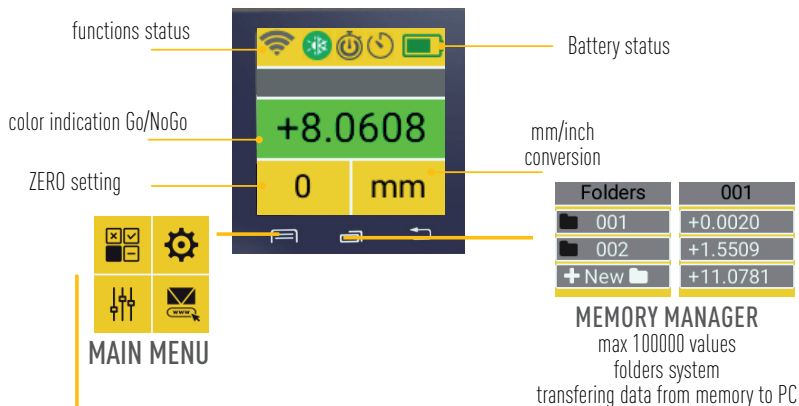
BUILT-IN BATTERY - rechargeable Li-Pol battery

Charging process indicating
on Battery status
(switch on device)



VIDEO INSTRUCTION



**LIMITS**

color Go/NoGo

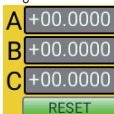
Max/Min

Enable

MAX

MAX/MIN

indicating max or min value

**FORMULA MODE** Ax^2+Bx+C

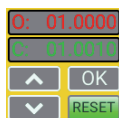
Timer

+000 sec.

RESET

TIMER MODE

saving or transfer data on timer

**ERROR COMPENSATION**

mathematical correction

Temp. comp.

None Mode

+25.00 C

TEMPERATURE COMPENSATION

manual correction 4 materials

**RESOLUTION**

selected up to 0.0001mm

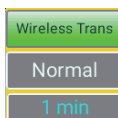
Extra

Axis Mode

Normal

AXIS MODE

normal or inverted

**WIRELESS**

modes of data transmission

Mode OFF

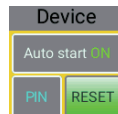
UART OFF

Keypad ON

CONFG

USB

USB connection configuration

**DEVICE SETTING**

autostart, reset, password

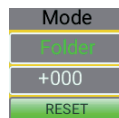
Angle

Sleep

Light High

SCREEN SETTING

screen rotation, brightness

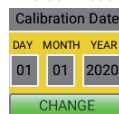
**MEMORY SETTING**

folder configuration

Link to software

**SOFTWARE**

link to download app

**CALIBRATION STATUS**

calibration date control

app@microtech.ua

F411RE

FW: 1.1.1

MAC: 00000

ID: 00000000

DEVICE INFO

service info about device



USB CONNECTION



USB-DONGLE

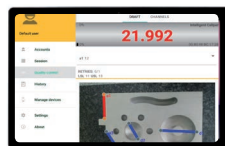


UP TO 50M

WIRELESS CONNECTION



IMPORT FROM FILE OR CAMERA



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 losing.
- 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



MICROTECH

FUNCTIONS

LIMITS GO/NOGO

MENU SETTING

+00.0001

> +00.0001

MIN

MAIN SCREEN

+8.0608

0 mm

NoGo Go NoGo

MAX - NoGo over MAX value
 MIN - NoGo over MIN value
 RANGE - selecting GO range
 NONE - No active mode

MAX/MIN

Max/Min

Enable

MAX

Status indication on main screen

+8.0608

0 mm

ENABLE/DISABLE mode indicating MAX dvalue indicating MIN value

FORMULA

A +00.0000

B +00.0000

C +00.0000

RESET

EXAMPLES:

- for value x2 - B=2
- set PRESET 100mm C=100
- square value A=1

Aavailable Formulas:
 - Ax^2+Bx+C
 -Radius (for indicators)
 -Sphere (for indicators)

TIMER

Timer

+000 sec.

RESET

Timer indication on main screen

+8.0608

0 mm

Saving or transfer data by Timer
 Select timer period
 For disactive - reset to zero

MATH. ERROR COMPENSATION

0. 01.0000

0. 01.0000

OK

RESET

Red value

- actual value on instrument

Green value

- compensated value

Use up&down button to update actual value (green) to correct value.
 For compensation correction - push OK.
 After points correction computerized instrument will recalculate values according corrected points

TEMPERATURE COMPENSATION

Temp. comp.

Glass, Quartz

Solid alloys, Mo

+25.00 C

RECYCLE

+8.0608

0 mm

Re-calculation value for calibration conditions 20C
 7 types of materials for selection
 Manual temperature setting

RESOLUTION

Resolution

X.0000

+8.0608

Selecting instrument resolution

EXTRA (Axis mode)

Extra

Axis Mode

Normal

+/- value indication

+8.0608

0 mm

Selecting normal or inverted axis mode



FUNCTIONS



MICROTECH

WIRELESS CONNECTION

Wireless Trans

Normal

1 min

WIRELESS status

+8.0608

0 mm

USB CONNECTION

Mode OFF

UART OFF

Keypad ON

CONFIG

PIN

Device

Auto start ON

PIN RESET



DISPLAY SETTING

Angle 0

Sleep off

Rotation 0, 90, 180, 270

Sleep mode

Brightness level

+8.0608

0 mm

8090'8+

MEMORY MANAGER SETTINGS

Mode

001

Folder

+0.0020

+000

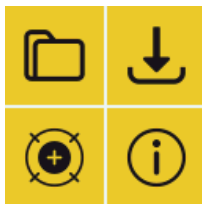
+1.5509

RESET

+11.0781

- Standard / Folder mode

In Folder mode possible to set qty values in each folder.



LINK TO SOFTWARE

Link to software

Link to page with MDS Software download

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

CALIBRATION DATE

Calibration Date

DAY MONTH YEAR

01 01 2020

CHANGE

Saving or transfer data by Timer

Select timer period

For disactive - reset to zero

DEVICE INFO

app@microtech.ua

F411RE

FW: 1.1.1

MAC: 00000

ID: 00000000

Information about firmware version and MAC adress for easy connection



MICROTECH



0.1μm



MICROTECH

innovative measuring instruments

61001, Kharkiv, Ukraine, str. Rustaveli, 39

tel.: +38 (057) 739-03-50

www.microtech.ua

tool@microtech.ua

Change without prior notice

Edition: M1030_0520