



COMPUTERIZED PUSH PULL GAUGE

USER MANUAL



Calibration ISO 17025:2017



ISO 9001:2015



Item No	Range		Resolution	Accuracy	Peak function	Indication	Data output	Calibration
	N	lbF	N	%			Wireless	
225170010	1-10	0.2-2	0,001	0.25	Electronic PEAK* function	computerized MICS system with 1,54" touchscreen	Long range	+
225170050	2-50	1-11,5	0,001	0.25			Long range	+
225170100	5-100	1-22,5	0,001	0.25			Long range	+
225170500	10-500	2-112	0,001	0.25			Long range	+

* Activate MIN/MAX function on MICS indication system to use leltronic PEAK function





Parameters	
LED display	color 1,54 inch
Resolution	240x240
Indication system	MICS 3.0
Power supply	Rechargeable Li-Pol battery
Battery capacity	450mAh
Charging port	micro-USB
Case material	Aluminium
Buttons	Switch (Multifunctional), Reset
Wireless data transfer	Long range data transfer

CHARGING



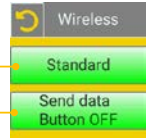
BUILT-IN BATTERY - rechargeable Li-Pol battery

For charging connect magnetic 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:

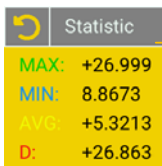
- by Touchscreen
- by Multifunctional button push (activated in Wireless menu)
- by Timer (activated in Timer menu)
- from Internal Memory

MEMORY

For save measuring data to internal 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)



Saved values

Each value can be Deleted or Send to application



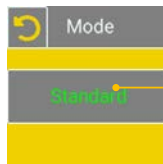
Button ALL select all values

All values can be Deleted or Send to application



MEMORY settings

Memory sub-menu



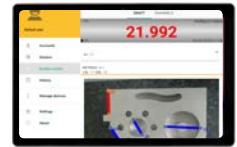
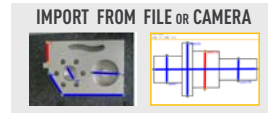
Selecting Standard mode or No saving data to internal memory



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 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



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	AVG: +5.3213
+26.9993	D: +26.863
-8.8673	

MENU CONFIGURATION



MAIN MENU



LIMITS
color Go/NoGo

Max/Min

Enable

MAX

MAX/MIN
indicating max or min value

Formula

$Ax+Bx+C$

Go/NoGo

FORMULA MODE
 Ax^2+Bx+C

Timer

+000 sec.

RESET



0.8970

0.8920

OK

RESET

ERROR COMPENSATION
mathematical correction

Temp.comp.

Sleep, Hold, Solid alloy, Mo

+00.00

TEMPERATURE COMPENSATION
manual correction

Resolution

X.0000

Millimeters

RESOLUTION
selected up to 0.0001mm

Extra

Axis Mode

Normal

CONNECT



Wireless

Standard

Send data

Button OFF

WIRELESS
modes of data transmission

Mode OFF

UART OFF

Keypad ON

CONNECT

USB
USB connection configuration

Device

PIN

RESET

DEVICE SETTING
pin, reset

Display

Angle 180

Sleep

CONNECT



Mode

Standard

MEMORY SETTING

Link to software

SOFTWARE
link to download app

Calibration

DAY MONTH YEAR

01 01 2020

CHANGE

CALIBRATION DATE

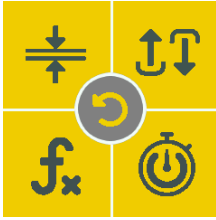
MICROTECH

www.microtech.us

COMP CALIPER 1

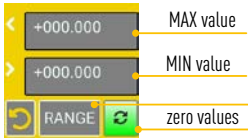
FW: 3.0.5

MAC: 12345



LIMITS GO/NOGO

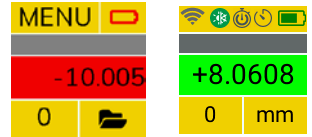
MENU SETTING



Colour indication limits

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

MAIN SCREEN INDICATION



NoGo

Go

MAX/MIN

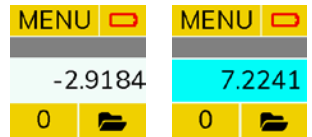
MENU SETTING



Indication and saving MAX or MIN values

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

MAIN SCREEN INDICATION



MIN

MAX

FORMULA

MENU SETTING



Formula:

$$Ax^2+Bx+C$$

A +000.000
B +001.000
C +000.000

Long push digit to select value

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

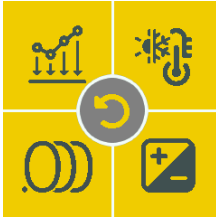


Saving data to memory or sending Wirelessly by Timer

Select timer period

Reset to disactivate mode

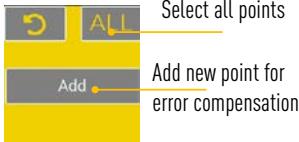




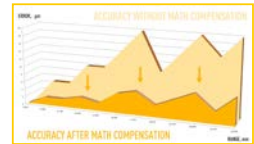
MATHEMATICAL ERROR COMPENSATION

MENU SETTING

Mathematical correction points with big error to normal values



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



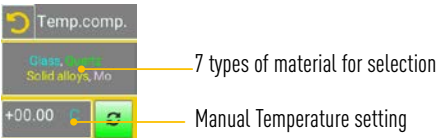
use gauge blocks or measuring machine for points correction

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

MAIN SCREEN INDICATION



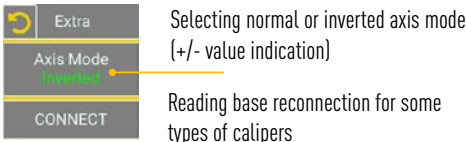
Resolution selecting
N/lbf conversion

+8.0608

Selecting resolution of value on main screen and memory

EXTRA (Axis mode)

MENU SETTING

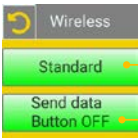


Selecting normal or inverted axis mode (+/- value indication)
Reading base reconnection for some types of calipers



WIRELESS CONNECTION

MENU SETTING Activating or disactivating wireless data transfer



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



PIN & RESET

MENU SETTING

Activating PIN to device setting

RESET to factory settings



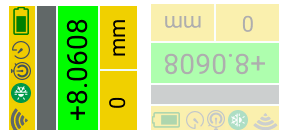
DISPLAY SETTING

MENU SETTING DISPLAY ROTATION, BRIGHTNESS, SLEEPING MODE



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

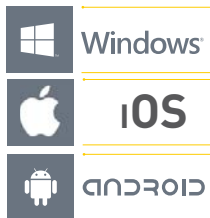
		ALL
+7.3563		
-0.1109		
+1.2293		
+26.9993		
-8.8673		

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

DAY	
01	
MONTH	
01	
YEAR	
2021	

DEVICE INFO

MENU SETTING



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



LONG RANGE 





MICROTECH

MICROTECH

innovative measuring instruments

61001, Kharkiv, Ukraine, str. Rustaveli, 39

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

www.microtech.ua

tool@microtech.ua

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