



# 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	ISO 17025
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 Electronic PEAK function



# TECHNICAL DATA



MICROTECH

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

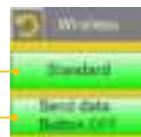
For charging connect magnetic USB cable  
Charging process indicating  
on Battery status  
(switch on device)



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 tp Tablet or PC:

- by Touchscreen
- by Multifactinal button psuh (activtied 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 throw menu or send  
Wireless connection to Windows PC, Android or iOS devices.

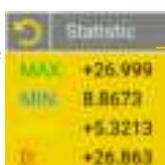
Basic STATISTIC functions:

MAX - maximum saved value

MIN - minimum saved value

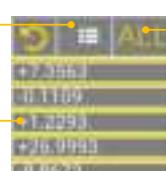
Avg - average value

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

# CONNECTION



MICROTECH



UP TO 50M



WIRELESS CONNECTION

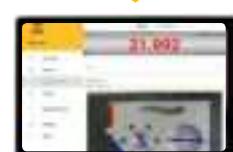


USB-DONGLE



iOS

IMPORT FROM FILE OR CAMERA



Windows

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



QUALITY  
CONTROL  
RESULTS

## DATA TRANSFER DISTANCE FOR INTELLIGENT INSTRUMENTS

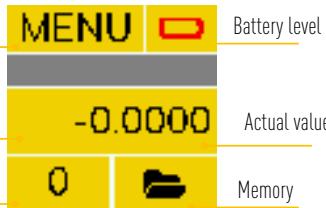
- All MICROTECH Intelligent instruments has internal memory.
- You can collect data to memory and when it will be necessary transfer all data to the peripheral device with no data lossing.
- It's possible transfer data, like in Wireless instruments up to 15 m or up 50 m with external antenna
- USB port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



USE TOUCHSCREEN TO OPERATE MENU

## MENU NAVIGATION

MENU button



Battery level

Colour can be changed according function

Actual value

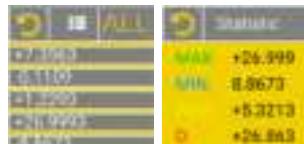
Zero setting

0



Memory

## MEMORY WITH STATISTIC



## MENU CONFIGURATION



## MAIN MENU

LIMITS  
color Go/NoGoMAX/MIN  
indicating max or min valueFORMULA MODE  
 $Ax^2+Bx+C$ ERROR COMPENSATION  
mathematical correctionTEMPERATURE COMPENSATION  
manual correctionRESOLUTION  
selected up to 0.0001mmWIRELESS  
modes of data transmissionUSB  
USB connection configurationDEVICE SETTING  
pin, reset

MEMORY SETTING

SOFTWARE  
link to download app

CALIBRATION DATE





### LIMITS GO/NOGO

MENU SETTING	Colour indication limits	MAIN SCREEN INDICATION
	MAX value MIN value zero values	MAX - NoGo more MAX value MIN - NoGo less MIN value RANGE - Go between MIN & MAX NONE - disactivating mode
		NoGo      Go

### MAX/MIN

MENU SETTING	Indication and saving MAX or MIN values	MAIN SCREEN INDICATION
	ENABLE - activating mode MAX - indicating MAX measured value MIN - indicating MIN measured value	MENU - -2.9184 0
		MIN      MAX

### FORMULA

MENU SETTING	FORMULA $Ax^2+Bx+C$	EXAMPLE OF FORMULA USING
	Formula: $4x^2+Bx+C$ Long push digit to select value Reset to zero arguments	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 Wireless by Timer	
	Select timer period Reset to deactivate mode	



## MATHEMATICAL ERROR COMPENSATION

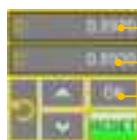
## MENU SETTING



Select all points

Add new point for  
error compensation

Mathematical correction points with big error to normal values



actual values

correct values by up&amp;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 for selection



Manual Temperature setting

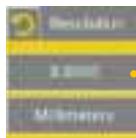
7 types of material:

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



## RESOLUTION

## MENU SETTING



Resolution selecting



N/lbf conversion

## MAIN SCREEN INDICATION

+8.0608

Selecting resolution of value on main screen and memory



## EXTRA (Axis mode)

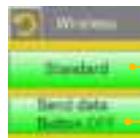
## MENU SETTING

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

Switch on Wireless data transmission

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



## USB CONNECTION

### MENU SETTING



USB connection mode under construction



## PIN & RESET

### MENU SETTING



Activating PIN to device setting

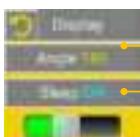


RESET to factory settings



## DISPLAY SETTING

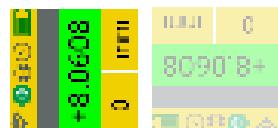
### MENU SETTING



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)

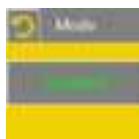




## MEMORY SETTINGS

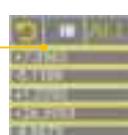
## MENU SETTING

Activating or disactivating saving values to memory



Standard - saving values to memory

OFF - disable saving to memory



## 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



Windows



iOS



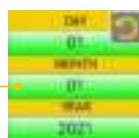
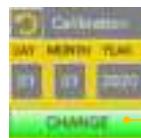
ANDROID



## CALIBRATION DATE

## MENU SETTING

Calibration date info



Push for change date info



## DEVICE INFO

## MENU SETTING



Information about device

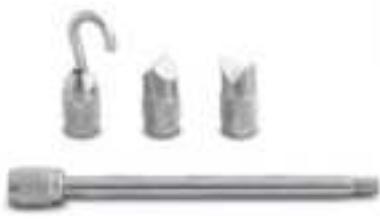
- device name
- firmware version
- MAC address for easy connection

# DIMESIONAL DRAWINGS



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LONG RANGE





**MICROTECH**

**MICROTECH**

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