



# COMPUTERIZED DEPTH CALIPER

## USER MANUAL



ISO17025:2017

ISO 9001  
BUREAU VERITAS  
Certification





Item No	Range		Reso- lution	Accu- racy	Base	Protection	Preset	Go/NoGo	Max/Min	Formula	Timer	Temp comp	Linear corr	Calibr date	Connect. status	Recharge batt	Memory	Wireless	USB	Display
	mm	inch	mm	µm																
1432010157	0-150	0-6"	0,005	±20	102	IP54	•	•	•	•	•	•	•	•	•	•	Folders / 2000 val	Long range / HID	USB HID / Update	2,4"
1432010207	0-200	0-8"		±25																
1432010307	0-300	0-12"		±30																
1432010507	0-500	0-20"	0,01	±40	150		•	•	•	•	•	•	•	•	•	Folders / 2000 val	Long range / HID	USB HID / Update	2,4"	
1432011007	0-1000	0-40"		±50																



PAT.US10184772

# MAIN INFO



MICROTECH



**SWITCH ON DEVICE** - button push (1 sec)

**SWITCH OFF DEVICE** - button push (2 sec)/ auto switch off

**DATA TRANSFER** - programming throw menu

**BUILT-IN BATTERY** - rechargeable Li-Pol battery



For charging connect USB cable

## TECHNICAL DATA

Parameters	
LED display	color 1,54 inch
Resolution	240x240
Indication system	MICS 4.0
Power supply	Rechargeable Li-Pol battery
Battery capacity	300 mAh
Charging port	micro-USB
Case material	Aluminium
Buttons	Switch (Multifunctional), Reset
Wireless data transfer	STANDARD / HID mode
USB data transfer	USB HID

### DOWNLOAD APP





## 3 MODES OF DATA TRANSFER (USB + 2 WIRELESS MODES)



### WIRELESS CONNECTION TO MDS APP



**FREE SOFTWARE**

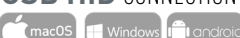


WIRELESS data transfer to MICROTECH MDS app for Windows, Android, iOS

### WIRELESS HID CONNECTION



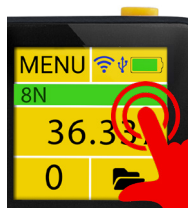
### USB HID CONNECTION



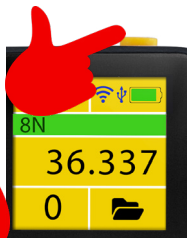
WIRELESS HID data transfer (like keyboard) direct to any customers app and system

USB HID data transfer (like keyboard) direct to any customers app and system

## 7 WAYS HOW TO TRANSFER DATA TO PC OR TABLET



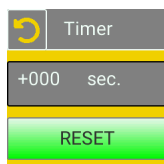
TOUCHSCREEN TAP



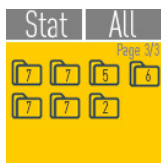
BUTTON PUSH



SELECTED FORCE



BY TIMER



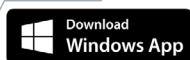
FROM MEMORY



IN MDS APP



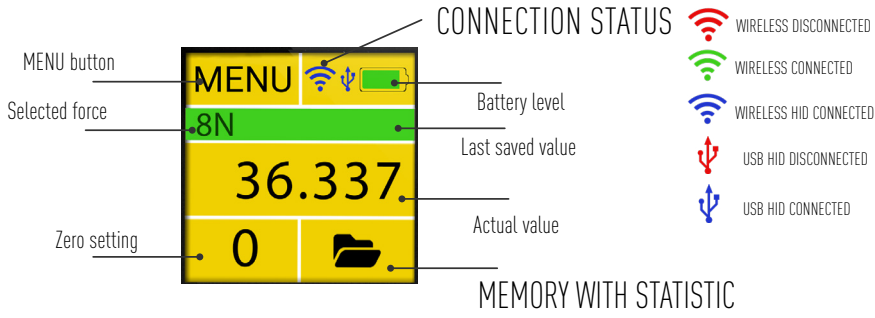
FROM PAIRED DEVICE



## DOWNLOAD APP

DOWNLOAD MDS APP FOR MICROTECH DEVICES WIRELESS CONNECTION FROM [www.microtech.ua](http://www.microtech.ua), GooglePlay & App Store

# MAIN SCREEN



# MEMORY

For save measuring data to internal caliper's memory touch data area on screen or button push. You can view saved data throw menu or send Wireless or USB connection to Windows PC, Android or iOS devices. You can save up to 2000 values to memory. It's possible to use Standard or Folders system.

<p>FOLDERS SYSTEM</p>	<p>MEMORY 2000 VAL.</p>	<p>MEMORY EXPORT</p>	<p>STATISTIC</p>	<p><b>Basic STATISTIC functions:</b></p> <ul style="list-style-type: none"> <li>MAX - maximum saved value</li> <li>MIN - minimum saved value</li> <li>AVG - average value</li> <li>D - difference between MAX &amp; MIN</li> </ul>
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STANDARD or FOLDER system can be activated throw MEMORY menu

# MENU STRUCTURE

**MENU CONFIGURATION**

USE TOUCHSCREEN TO OPERATE MENU  
SWIPE TO MOVE INSIDE



## LIMITS mode GO/NOGO



MAX - NoGo more Upper limit  
 MIN - NoGo less Lower limit  
 RANGE - Go between Limits

## COLOR INDICATION LIMITS ON MAIN SCREEN Go NoGo

>	2.000	Upper limit
<	3.000	Lower limit
%	20	
SCALE	RES	

## PEAK mode MAX/MIN



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

## INDICATION AND SAVING MAX OR MIN VALUES

Max/Min	
Enabled	MAX - indicating MAX measured value MIN - indicating MIN measured value
MAX	

## TIMER mode



## SAVING DATA TO MEMORY OR SENDING WIRELESS/USB BY TIMER

Timer	
0.000 sec	Select timer period
Reset	Reset to deactivate mode

## FORMULA mode



Formula	
Ax <sup>2</sup> +Bx+C	Select FORMULA Type (Math, Radius or other)
Set Argv	Select arguments

## RESOLUTION selection



Resolution	
X.0000	Resolution selecting
mm	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	Display rotation 0°, 90°, 180°, 270°
Angle 270	
Sleep ON	Brightness level

## LINEAR error compensation



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

## Linear correction error's on device actual values

O: 17.251	
C: 17.258	correct values by up&down button
UP	OK
DN	RES

**SET ACTUAL ZERO POINT FIRSTLY**

## TEMP compensation



Manual Temperature setting

Temp.com.	
Cu, Cu alloys	
27.5°C	RES

4 types of material for selection:

- Glass, Quartz
- Stainless steel
- Cuprum and alloys
- Aluminium and alloys

# FUNCTIONS



MICROTECH

## WIRELESS data transfer

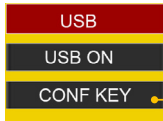


Reconnection button  
Wireless power regulation



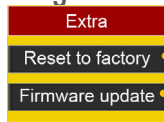
**ON** - WIRELESS data transfer to MDS App for Android, iOS, Windows  
**HID** - WIRELESS HID direct transfer data to any App in Windows, MacOS, Linux, Android devices (like keyboard). Configure data format in USB sub-menu  
**2D-S** - Slave device on WIRELESS connection on HUB mode

## 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  
Configuring data transfer Dot/Comma and Tab/Arrow Down/CR+LF

## 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)

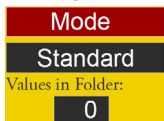
## FORCE



Selecting Force value from 1 to 20 N

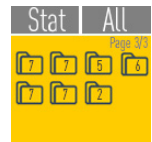
**Indication mode** indication with color upon reaching a given Force  
**Automatic mode** gives possibility saving to memory or transfer to app actual value upon reaching a given Force (1-20N).

## 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

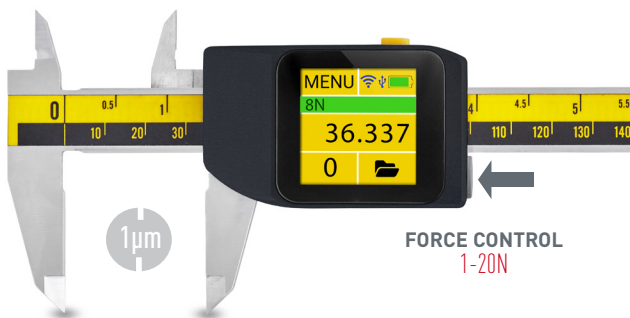


**MICROTECH**

# INDUSTRY 4.0 INSTRUMENTS



0,1µm



**FORCE CONTROL**  
1-20N

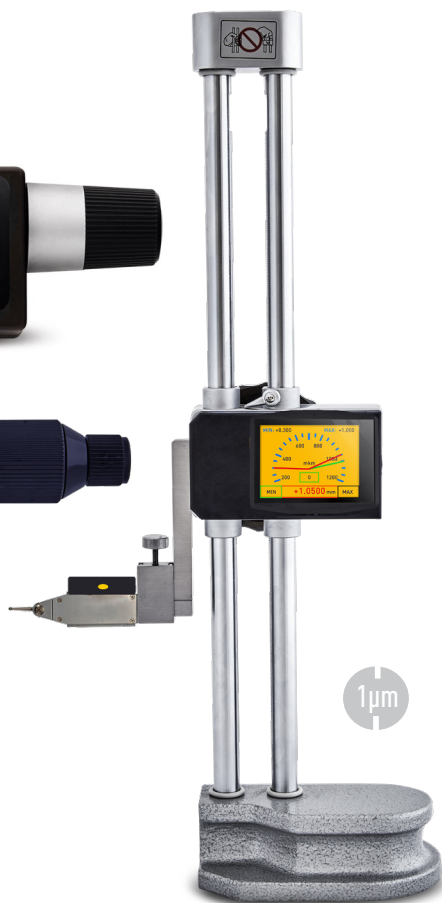
1µm



0,1µm



0,1µm



1µm

## **MICROTECH**

innovative measuring instruments

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Change without prior notice