

COMPUTERIZED CALIPER

USER MANUAL

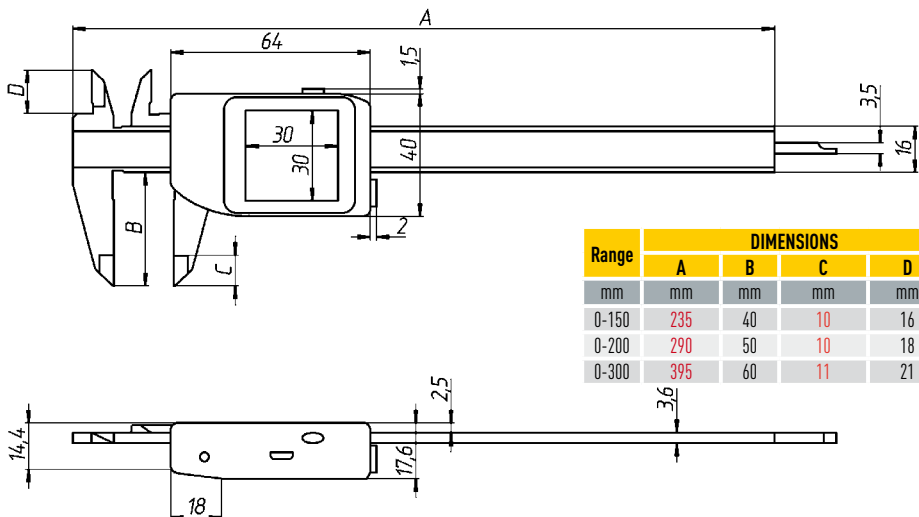




Item No	Range		Resolution	Accuracy*	eForce	Carbide jaws	Preset	Go/NoGo	Max/Min	Formula	Timer	Temp comp	Linear corr	Calibr date	Connect. status	Recharge batt	Memory	Wireless	USB	Color Display
	mm	inch	mm	µm	N															
141097015A	0-150	0-6"	0,001	±5	1-20		•	•	•	•	•	•	•	•	•	•	Folders / 2000 val	Long range / HID	USB HID / Update	Touchscreen 1,54"
141077015A			0,005	±10			•	•	•	•	•	•	•	•	•	•				
141077015C			0,005	±20			•	•	•	•	•	•	•	•	•	•				
141077015B			0,005	±20			•	•	•	•	•	•	•	•	•	•				
141097020A	0-200	0-8"	0,001	±8	1-20		•	•	•	•	•	•	•	•	•	Folders / 2000 val	Long range / HID	USB HID / Update	Touchscreen 1,54"	
141077020A			0,005	±10			•	•	•	•	•	•	•	•	•					
141077020C			0,005	±20			•	•	•	•	•	•	•	•	•					
141077020B			0,005	±20			•	•	•	•	•	•	•	•	•					
141097030A	0-300	0-12"	0,001	±10	1-20		•	•	•	•	•	•	•	•	•	Folders / 2000 val	Long range / HID	USB HID / Update	Touchscreen 1,54"	
141077030A			0,005	±15			•	•	•	•	•	•	•	•	•					
141077030C			0,005	±30			•	•	•	•	•	•	•	•	•					
141077030B			0,005	±30			•	•	•	•	•	•	•	•	•					

* For internal jaw and depth bar accuracy according ISO13385-1

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 (Multifunktional), Reset
Wireless data transfer	STANDARD / HID mode
USB data transfer	USB HID

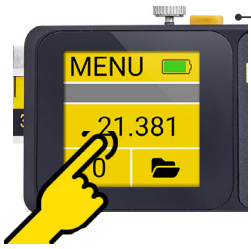
TECHNICAL DATA**DIMENSIONAL DRAWINGS**

Range	DIMENSIONS			
	A	B	C	D
mm	mm	mm	mm	mm
0-150	235	40	10	16
0-200	290	50	10	18
0-300	395	60	11	21

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

FORCE CONTROL

FORCE indication 1-20 N



FORCE 1-20N

Caliper with electronic multi-Force control module, gives possibility measure all time with requested Force. Measuring Force can be selected throw menu in range 1-20N.

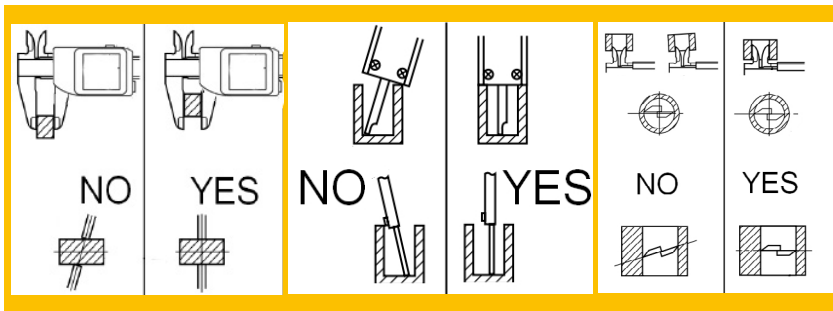
Green color indicating actual Force

Red color - over Force indicating

Auto Force mode gives possibility saving to memory or transfer to app actual value upon reaching a given Force (1-20N).

For **ZERO** setting also use Force control module (push Force up to **Green** indication and push **0** button)

CORRECT MEASURING





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



KEYBOARD MODE

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

USB HID CONNECTION



KEYBOARD MODE

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



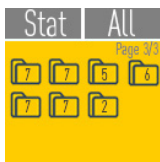
BUTTON PUSH



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, GooglePlay & App Store

MAIN SCREEN



MICROTECH

CONNECTION STATUS

- WIRELESS DISCONNECTED
- WIRELESS CONNECTED
- WIRELESS HID CONNECTED
- USB HID DISCONNECTED
- USB HID CONNECTED

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>Basic STATISTIC functions:</p> <ul style="list-style-type: none"> MAX - maximum saved value MIN - minimum saved value AVG - average value D - difference between MAX & MIN
-----------------------	-------------------------	----------------------	------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

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 ² +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

confirm point correction

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

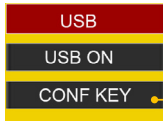


Reconnection button
Wireless power regulation



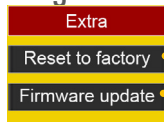
ON - WIRELESS data transfer to MDS App for Android, iOS, Windows
HID- WIRELESS HID direct transfer data to any App in Windows, MacOS, Linux, Android devices (like keyboard). Configure data format in USB sub-menu
2D-S - Slave device on WIRELESS connection on HUB mode

USB OTG data transfer



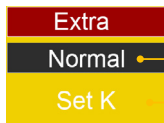
Connect USB cable to PC & Activate USB HID connection mode
Select setting of data transfer
Direct transfer data to any App in Windows, MacOS, Linux, Android devices
Configuring data transfer Dot/Comma and Tab/Arrow Down/CR+LF

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)

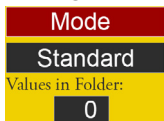
FORCE



Selecting Force value from 1 to 20 N

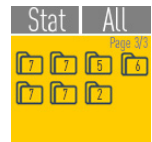
Indication mode indication with color upon reaching a given Force
Automatic mode gives possibility saving to memory or transfer to app actual value upon reaching a given Force (1-20N).

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



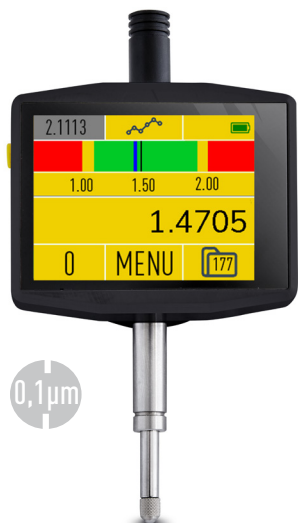
Information about device

- Firmware version
- MAC adress for WIRELESS connection

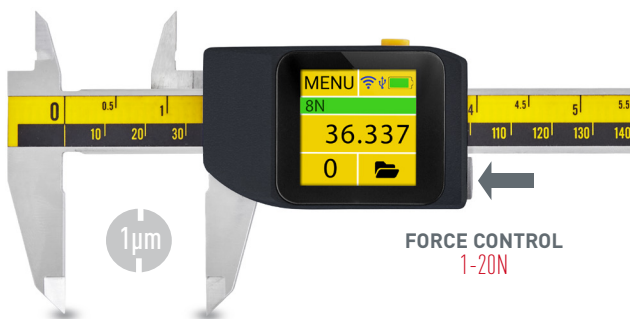


MICROTECH

INDUSTRY 4.0 INSTRUMENTS



0,1µm



FORCE CONTROL
1-20N

1µm



0,1µm



0,1µm



1µm

MICROTECH

innovative measuring instruments

61001, Kharkiv, Ukraine, str. Rustaveli, 39

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

www.microtech.ua

tool@microtech.ua

Change without prior notice