

2D COMPUTERIZED HEIGHT GAUGE

USER MANUAL



ISO17025:2017

ISO 9001
BUREAU VERITAS
Certification



ISO 9001:2015



Item No	Range		Resolut.	Accur.	Fine adjust precis.. wheel	2D connection	Measuring HUB	ON-line Graphic	Analog scale	Preset	Go/NoGo	Max/Min	Formula	Timer	Memory	Wireless	USB
	X	Y															
	mm	mm															
1443030371	0-300	0-13	0,001	±15	•	•	•	•	•	•	•	•	•	•	•	•	•
1443050371	0-500	0-25		±20	•	•	•	•	•	•	•	•	•	•	•	•	•
1443090371	0-1000	0-50		±30	•	•	•	•	•	•	•	•	•	•	•	•	•

Parameters	
LED display	color 2,4 inch 320x240
Indication system	MICS 4.0
Power supply	Rechargeable Li-Pol battery 500 mAh
Charging port	micro-USB
Case material	Aluminium
Wireless data transfer	Long range / HID
USB data transfer	USB HID

TECHNICAL DATA



MAIN INFO

- SWITCH ON DEVICE** - button push (1 sec)
- SWITCH OFF DEVICE** - button push (3 sec)/ auto switch off
- DATA TRANSFER** - programming throw menu



BUILT-IN BATTERY - rechargeable Li-Pol battery

DOWNLOAD APP

DOWNLOAD MDS APP FOR MICROTECH DEVICES
 WIRELESS CONNECTION FROM www.microtech.ua,
 GooglePlay & App Store



DATA TRANSFER



MICROTECH

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

WIRELESS CONNECTION TO MDS APP

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



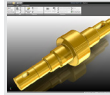
FREE SOFTWARE



NO DONGLE



SAVING DATA
TO XLS, CSV
FORMATS



TRANSFER DATA TO
CAD, SPC OR OTHER
SOFTWARE



TRANSFER DATA TO
EXCEL OR OTHER
TABLE EDITORS



SAVING
GRAPH



WIRELESS HID CONNECTION USB HID CONNECTION



NO DONGLE



TRANSFER DATA TO
CAD, SPC OR OTHER
SOFTWARE



TRANSFER DATA TO
EXCEL OR OTHER
TABLE EDITORS



TRANSFER DATA
TO ANY BROWSER
OR APP

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

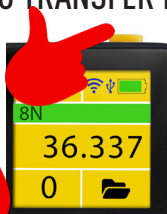
7 WAYS HOW TO TRANSFER DATA TO PC OR TABLET



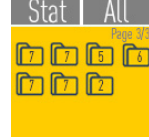
TOUCHSCREEN TAP



BY TIMER



BUTTON PUSH



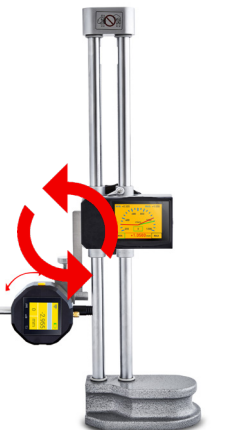
FROM MEMORY



SELECTED FORCE



IN MDS APP

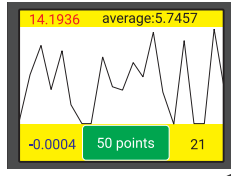


FROM PAIRED DEVICE

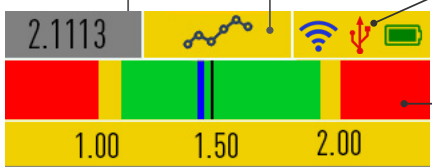


MAIN SCREEN

ON-LINE GRAPHIC MODE



LAST VALUE



ANALOG SCALE

1.4705

0 MENU 177

CONNECTION STATUS

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

MEMORY



STANDARD or FOLDER system can be activated throw MEMORY menu

For save measuring data to internal device memory touch data area on screen or button push. You can view saved data or send by WIRELESS or USB connection to Windows PC, Android or iOS It's possible to use Standard or Folders memory modes



Stat	All	Stat	All	Stat	All	Statistic
1:	0.0000	1:	0.0000	Delete or Send?		MAX: +26.999
2:	1.2334	2:	1.2334	Del Send		MIN: 8.8673
3:	1.2337	3:	1.2337			AVG: +5.3213
4:	1.2333	4:	1.2333			D: +26.863
5:	1.2341	5:	1.2341			

FOLDERS SYSTEM MEMORY 2000 VAL. MEMORY EXPORT STATISTIC

MAIN SCREEN on 2D mode

ANALOG SCALE FOR PROBE MODE



2D AND HUB MODE

0 75.573

- PROBE** - Saving data when Probe will reach value
- PROBE Auto** - Saving data when Probe will reach value with this value compensation
- 2D** - 2 axis data reading
- 2D Sync** - Synchronized 2 axis data reading

ON-LINE GRAPHIC MODE

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FUNCTIONS

LIMITS mode GO/NOGO



MAX - NoGo more Upper limit
MIN - NoGo less Lower limit
RANGE - Go between Limits
NONE - Analog scale active

COLOR INDICATION LIMITS ON MAIN SCREEN **Go NoGo**

>	2.000	Upper limit
<	3.000	Lower limit
%	20	Yellow zone on analog scale
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
MAX	MIN - indicating MIN measured value

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

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

TEMP compensation



Manual Temperature setting

Temp.com.	
Cu, Cu alloys	
27.5°C	RES

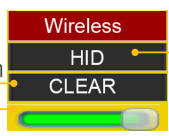
- 4 types of material for selection:
- Glass, Quartz
 - Stainless steel
 - Cuprum and alloys
 - Aluminium and alloys



WIRELESS data transfer

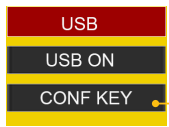


Reconnection button
Wireless power regulation



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
2D-M - Master 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

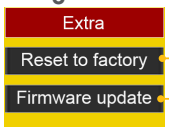
LINK to app's



QR Link to MICROTECH web site page with MDS Software download
- Android, iOS, Windows versions
- Free and Pro versions
- Manuals



RESET to Factory settings



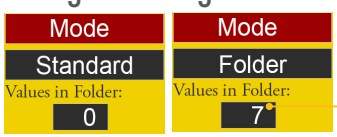
Push 10 times to RESET device to factory settings
Push 10 times to FIRMWARE UPDATE

EXTRA

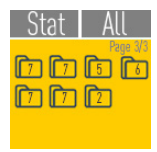


Selecting normal or inverted axis mode (+/- value indication)
Coefficient setting (for distributor and calibration only)

MEMORY manager setting

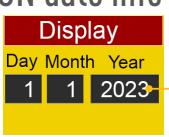


Activating STANDARD or FOLDER SYSTEM
Values in each Folder



FOLDERS SYSTEM

CALIBRATION date info



Push for change calibration date info

Device INFO

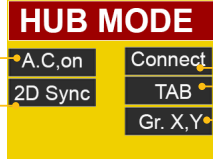


Information about device
- Firmware version
- MAC adress for WIRELESS connection



HUB connection

- A.C.on** - Auto Connection active
- A.C.off** - Auto Connection no active



- External Wireless device connection
- Symbol between Axis
- Graphic mode indication setting

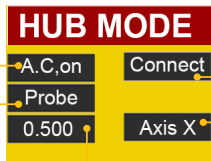
- PROBE** - Saving data when Probe will reach value
- PROBE Auto** - Saving data when Probe will reach value with this value compensation
- 2D** - 2 axis data reading
- 2D Sync** - Synchronized 2 axis data reading
- Disable** - switch off modes

2D MODE

2D CONNECTION PROCESS

- Slave device** WIRELESS menu- 1.1 Push **CLEAR** button and 1.2 Activate 2D Slave mode **2D-S**
- MASTER device** WIRELESS menu- 2.1 Push **CLEAR** button and 2.2 Activate 2D Master mode **2D-M**
- MASTER device** HUB connection menu- 3.1 Activate **2D** or **2D Sync** mode and 3.2 Setting **A.C.on/off** (auto-reconnect) and 3.3 setting of saving on memory and transfer data (X, Y or XY synchronized)
- MASTER device** HUB connection menu- 4.1 Push **CONNECT** button and start searching Slave devices (40s) 4.2 push for MAC address of indicated slave device to start connection. 4.3. If **MASTER device** indicate **SUCCESSFUL CONNECTION** - you can start measurements, but If **MASTER device** indicate **CONNECTION ERROR** - re-connect devices again (from step 1).

- A.C.on** - Auto Connection active
- A.C.off** - Auto Connection no active



- External Wireless device connection
- Axis priority selecting
- Setting PROBE limit value

- PROBE** - Saving data when Probe will reach value
- PROBE Auto** - Saving data when Probe will reach value with this value compensation
- 2D** - 2 axis data reading
- 2D Sync** - Synchronized 2 axis data reading
- Disable** - switch off modes

PROBE MODE

2D CONNECTION PROCESS

- Slave device** WIRELESS menu- 1.1 Push **CLEAR** button and 1.2 Activate 2D Slave mode **2D-S**
- MASTER device** WIRELESS menu- 2.1 Push **CLEAR** button and 2.2 Activate 2D Master mode **2D-M**
- MASTER device** HUB connection menu- 3.1 Activate **PROBE** or **PROBE Auto** mode and 3.2 Setting **A.C.on/off** (auto-reconnect) and 3.3 Axis priority and 3.4 Probe limit value
- MASTER device** HUB connection menu- 4.1 Push **CONNECT** button and start searching Slave devices (40s) 4.2 push for MAC address of indicated slave device to start connection. 4.3. If **MASTER device** indicate **SUCCESSFUL CONNECTION** - you can start measurements, but If **MASTER device** indicate **CONNECTION ERROR** - re-connect devices again (from step 1).

VIDEO INSTRUCTION of 2D and PROBE MODE CONNECTION



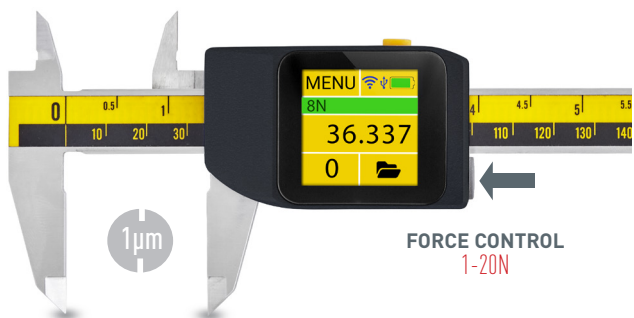


MICROTECH

INDUSTRY 4.0 INSTRUMENTS



0,1µm



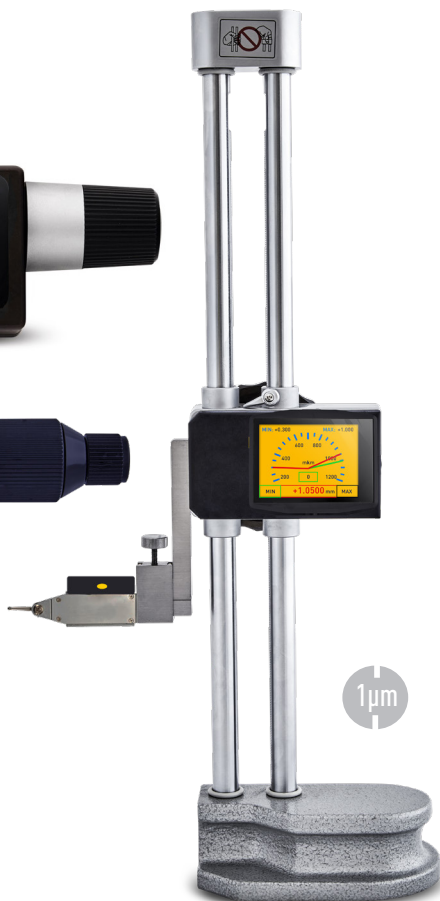
FORCE CONTROL
1-20N



0,1µm



0,1µm



1µm

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