

**MICROTECH**

est. 1995

UKRAINIAN CREATIVITY

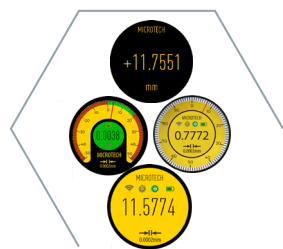


GERMAN RELIABILITY



MICROTECH INSTRUMENTS

CONNECTION BOOK



MICROTECH INSTRUMENTS FUNCTIONS

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WIRELESS CONNECTION TO IOS & MACOS DEVICES

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DATAMET, SWISSMET INSTRUMENTS



WIRELESS CONNECTION TO ANDROID DEVICES

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DATAMET, SWISSMET INSTRUMENTS



WIRELESS CONNECTION TO WINDOWS DEVICES

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DATAMET, SWISSMET INSTRUMENTS



WIRELESS HID CONNECTION

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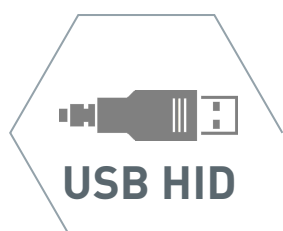
DATAMET, SWISSMET INSTRUMENTS



USB HID CONNECTION

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DATAMET, SWISSMET INSTRUMENTS



USB HID CONNECTION

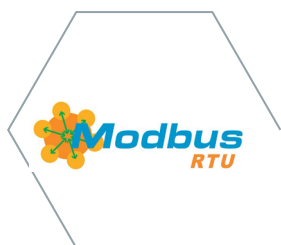
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CERTIMET INSTRUMENTS



HUB CONNECTION

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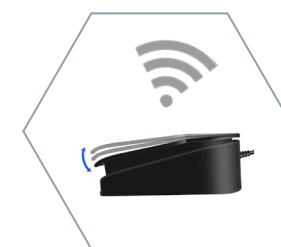
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WIRELESS FOOTSWITCH CONNECTION

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USB-FOOTSWITCH CONNECTION

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DataMet INSTRUMENTS - ROUND 1.8" TOUCHSCREEN DISPLAY

ADJUSTABLE SCALES



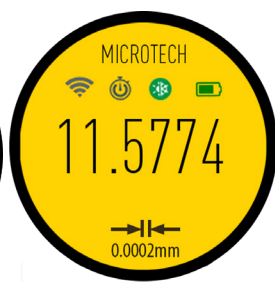
COMPARATOR



ANALOG



DIGITAL



DIGITAL



DISPLAY: 1.8" ROUND Hi-res Touchscreen display

READING SYSTEM: PRECISION SWISS MADE READING SYSTEM 0.0002 or 0.0005mm resolution

DATA TRANSFER MODES:

- WIRELESS data to MDS app (Windows, Android, MacOS, iOS)
- WIRELESS HID to any app and OS (dot/comma/symbols config)
- WIRELESS HID+MAC to any app and OS (with MAC address)
- USB HID to any app and OS (dot/comma/symbols config)
- MODBUS RTU (modifications) **NEW!!!**



HUB CONNECTION:

- HUB (2D, Probe) synchronization (Slave device)
- HUB (2D, Probe) synchronization (Master device)

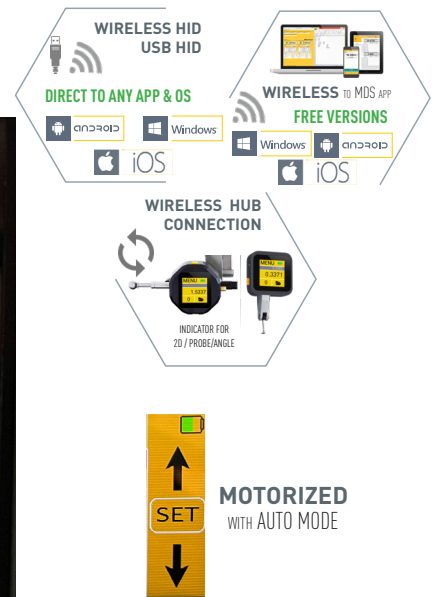
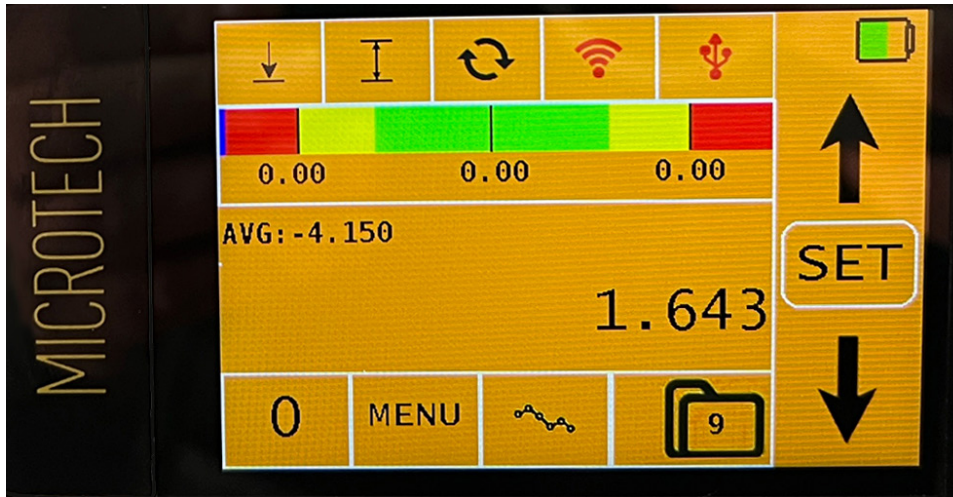
FUNCTIONS: GRAPHIC, SYNCHRONIZED DEVICE, TIMER, PRESET, FORMULA, RESOLUTION SELECTION, PEAK, LIMITS, GRAPHIC, MULTISCALE (4 scales)

CALIBRATION: CALIBRATION DATE CONTROL, LINEAR ERROR COMPENSATION

MEMORY: 50000 values with FOLDERS, STATISTICS. Data transfer from MEMORY

BATTERY: RECHARGEABLE 600 mAh Li-Pol battery, USB-C charging/data socket

DataMet INSTRUMENTS - 3.5" TOUCHSCREEN DISPLAY



DISPLAY: 3.5" Hi-res Touchscreen display

FOR USING ON **MOTORIZED** OR MANUAL HEIGHT GAUGES and MEASURING STANDS
TOUCH PROBE PROBES, LASER PROBES CONNECTION for 2D / PROBE functions

READING SYSTEM: DIFFERENT READING SYSTEMS (STANDARD/**SWISS MADE**)

DATA TRANSFER MODES:

- WIRELESS data to MDS app (Windows, Android, MacOS, iOS)
- WIRELESS HID to any app and OS (dot/comma/symbols config)
- WIRELESS HID+MAC to any app and OS (with MAC address)
- USB HID to any app and OS (dot/comma/symbols config)
- MODBUS RTU (modifications)

HUB CONNECTION:

- HUB (2D, Probe) synchronization (Slave device)
- HUB (2D, Probe) synchronization (Master device)

FUNCTIONS: GRAPHIC, SYNCHRONIZED DEVICE, TIMER, PRESET, FORMULA, RESOLUTION SELECTION, PEAK, LIMITS, GRAPHIC, **MOTORIZED** with AUTO mode, LASER/TOUCHPROBES connection, MANUAL TEMPERATURE COMPENSATION

CALIBRATION: CALIBRATION DATE CONTROL, LINEAR ERROR COMPENSATION

MEMORY: 2000 values with FOLDERS, STATISTICS. Data transfer from MEMORY

BATTERY: RECHARGEABLE 2000 mAh Li-Pol battery, USB-C charging/data socket



DataMet INSTRUMENTS - 2.0 / 2.4" TOUCHSCREEN DISPLAY



DISPLAY: 2.0 and 2.4" Hi-res Touchscreen displays

FOR USING ON PRECISION MEASURING INSTRUMENTS (calipers, indicators, micrometers)

READING SYSTEM: DIFFERENT READING SYSTEMS (STANDARD/**SWISS MADE**)

FORCE CONTROL: MODIFICATIONS with E-FORCE (1-20N, multimodes)

DATA TRANSFER MODES:

- WIRELESS data to MDS app (Windows, Android, MacOS, iOS)
- WIRELESS HID to any app and OS (dot/comma/symbols config)
- WIRELESS HID+MAC to any app and OS (with MAC address)
- USB HID to any app and OS (dot/comma/symbols config)
- MODBUS RTU (modifications)



HUB CONNECTION:

- HUB (2D, Probe) synchronization (Slave device)
- HUB (2D, Probe) synchronization (Master device)

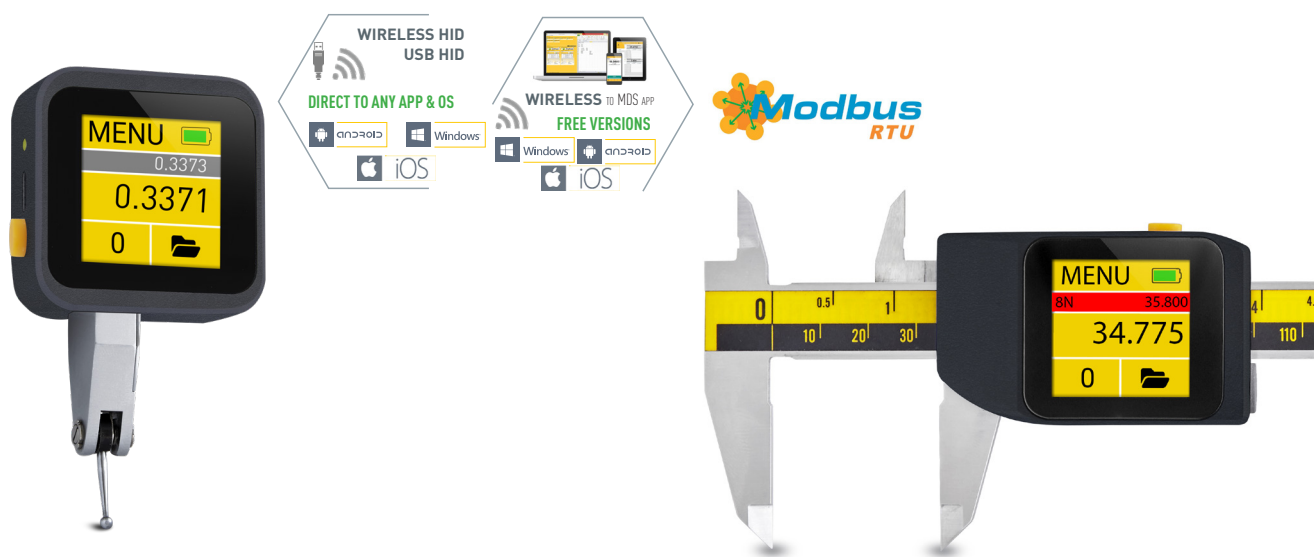
FUNCTIONS: GRAPHIC, SYNCHRONIZED DEVICE, TIMER, PRESET, FORMULA, RESOLUTION SELECTION, PEAK, LIMITS, GRAPHIC, FW update, MANUAL TEMPERATURE COMPENSATION, E-FORCE control (modifications)

CALIBRATION: CALIBRATION DATE CONTROL, LINEAR ERROR COMPENSATION

MEMORY: 2000 values with FOLDERS, STATISTICS. Data transfer from MEMORY

BATTERY: RECHARGEABLE 600 mAh Li-Pol battery, USB-C charging/data socket

DataMet INSTRUMENTS - 1.54" TOUCHSCREEN DISPLAY



DISPLAY: 1.54" Touchscreen displays

FOR USING ON MEASURING INSTRUMENTS (calipers, indicators, internal micrometers)

READING SYSTEM: STANDARD READING SYSTEMS

FORCE CONTROL: MODIFICATIONS with E-FORCE (1-20N, multimodes)

DATA TRANSFER MODES:

- WIRELESS data to MDS app (Windows, Android, MacOS, iOS)
- WIRELESS HID to any app and OS (dot/comma/symbols config)
- WIRELESS HID+MAC to any app and OS (with MAC address)
- USB HID to any app and OS (dot/comma/symbols config)
- MODBUS RTU (modifications)



HUB CONNECTION:

- HUB (2D, Probe) synchronization (Slave device)

FUNCTIONS: LIMITS, PEAK, TIMER, PRESET, FORMULA, RESOLUTION SELECTION, FW update, MANUAL TEMPERATURE COMPENSATION, E-FORCE control (modifications)

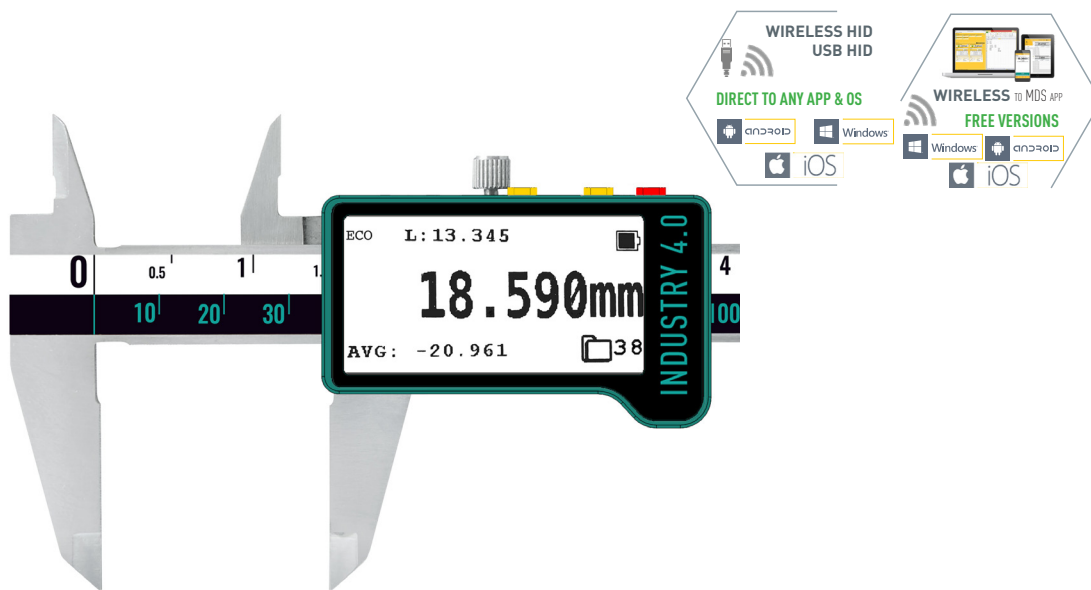
CALIBRATION: CALIBRATION DATE CONTROL, LINEAR ERROR COMPENSATION

MEMORY: 2000 values with STATISTICS. Data transfer from MEMORY

BATTERY: RECHARGEABLE 400 mAh Li-Pol battery, USB-C charging/data socket

MICROTECH INSTRUMENTS FUNCTIONS

E-INK INSTRUMENTS 2.13" E-INK DISPLAY



DISPLAY: 2.13" E-ink mono displays

ENERGY ECONOMY (200+ working hours/ 1 charging)

FOR USING ON MEASURING CALIPERS

READING SYSTEM: STANDARD READING SYSTEMS

DATA TRANSFER MODES:

- WIRELESS data to MDS app (Windows, Android, MacOS, iOS)
- WIRELESS HID to any app and OS (dot/comma/symbols config)
- WIRELESS HID+MAC to any app and OS (with MAC address)
- USB HID to any app and OS (dot/comma/symbols config)

FUNCTIONS: LIMITS, PEAK, TIMER, PRESET, FORMULA, RESOLUTION SELECTION, FW update

CALIBRATION: CALIBRATION DATE CONTROL, LINEAR ERROR COMPENSATION

MEMORY: 1000 values with STATISTICS. Data transfer from MEMORY

BATTERY: RECHARGEABLE 500 mAh Li-Pol battery, USB-C charging/data socket

SwissMet WIRELESS INSTRUMENTS



SWISS ELECTRONICS IP67 proof with BIG SCREEN DISPLAYS (plastic or AL casing)

READING SYSTEM: SWISS ELECTRONICS IP67

FOR USING ON PRECISION CALIPERS with IP67 proof

DATA TRANSFER MODES:

- WIRELESS data to MDS app (Windows, Android, MacOS, iOS)
- WIRELESS HID to any app and OS
- WIRELESS HID+MAC to any app and OS (with MAC address)

FUNCTIONS: PRESET, HOLD, mm/inch, Error compensation, etc.

BATTERY: CR 2032 3V



SwissMet
interface



CONNECTION
possibilities

CertiMet INSTRUMENTS



BUDGET electronics for using on calipers, micrometers, indicators with IP54, IP65, IP67 proof

DATA TRANSFER MODES:

- USB HID to any app and OS

OPTIONAL FUNCTIONS: PRESET, HOLD

BATTERY: CR 2032 3V

- **FREE** MDS application for iOS, MacOS
- MDS application can be downloaded on the AppStore
- For connection with **DataMet** / **WIRELESS SwissMet** instruments
- Standard and Energy saving mode (for **WIRELESS SwissMet** instruments)
- Up to 8 connections **DataMet** / **WIRELESS SwissMet** instruments at the same time
- **Functions:** Go/NoGo, Timer, Linear correction, Statistics mode, Data Export, Graphic, Voice mode, USe manager, Graphical mode
- **NO USB-DONGLE REQUESTED**



	MDS for iOS	MDS for MacOS
	FREE	FREE
	299100060	299100060
Platform	iOS	MacOS (M1+)
Instruments connection	DataMet / WIRELESS SwissMet	
Max. instruments	8	8
mm/inch conversion	•	•
Go/NoGo functions	•	•
Graphical mode	•	•
Reading on Timer	•	•
Measuring history	•	•
Save data to xls		•
Save data to csv	•	•
Save graph	•	•
User manager	•	•
Instrument battery status	•	•
Voice mode		•
Multilanguage	3 language	3 language



VIDEO

DEMO video with Installation, Connection and Measuring process



VIDEO

APP INSTALLATION

Install the latest MDS App from App Store.



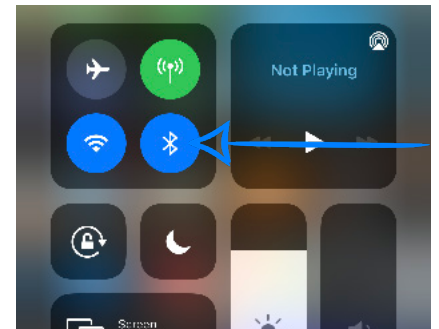
DOWNLOAD
MDS app iOS, MacOS



APP ACCESS

Confirm application access to Bluetooth module of Smartphone.

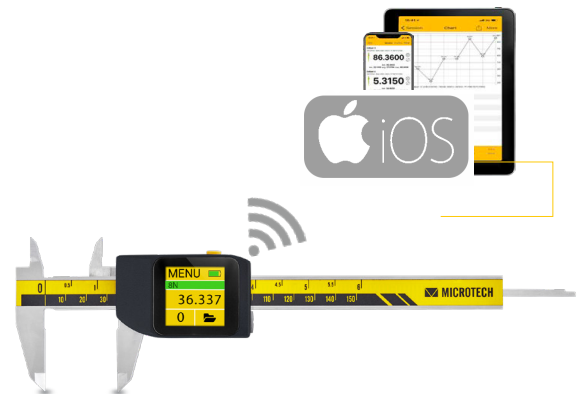
Make sure that Bluetooth is switched on (App request it to receiving data from Wireless and DataMet MICROTECH instruments)



INSTRUMENTS CONNECTION

DATAMET INSTRUMENTS CONNECTION

- The distance between the DataMet MICROTECH instrument and the iOS device is 7-50 meters depends on transfer mode and premises conditions
- All MICROTECH DataMet instruments with MICS system has internal memory. It's possible to collect data to memory and transfer all data to your device with no data losing to any distance.
- DataMet MICROTECH instruments have only **MDS MODE** of Wireless data transfer:
 - non-stop data transfer 4 value/sec.



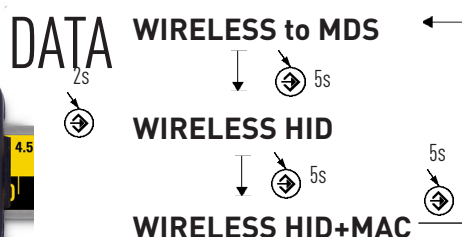
WIRELESS SWISSMET INSTRUMENTS CONNECTION

- Distance between the Wireless MICROTECH instrument and iOS device is 5-25 meters depends of transfer mode and premises conditions
- MICROTECH Wireless instruments have 2 modes of data transfer:
 - MDS MODE**
 - non stop data transfer 4 times/sec
 - CR2032 battery works in non stop data transfer up to 100h
 - ECONOMY MODE**
 - data transfer only by Wireless button press
 - CR2032 battery works in this mode up to 6 months

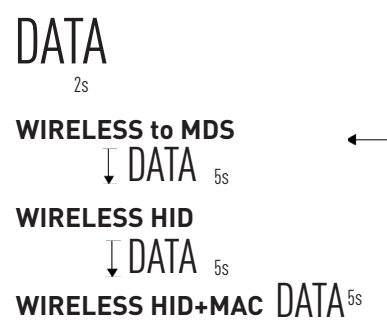


We recommend to use ECONOMY MODE for MICROTECH Wireless instruments

ACTIVATE WIRELESS to MDS app on WIRELESS SwissMet instrument
SWITCH on ECO sub mode on MDS app iOS, MacOS -ECO recommended for battery



← **ACTIVATE WIRELESS to MDS app**



MICROTECH caliper with Built-in Wireless data output module for transfer results

MODE	TRANSFER DATA	Switch ON	Switch OFF	Select MODE	DATA send
WIRELESS TO MDS	STANDARD	MICROTECH MDS app Windows, Android, iOS, MacOS	2s. auto switch off when disconnect	STANDARD or ECO in MDS app	indic. push, or on MDS app
	ECO (GATT)	all time active			no
WIRELESS HID	Direct to any customer app (like keyboard)	2s auto switch off when disconnect or no data 10 min	5s. and connect BT on PC or Tablet	2 sec	push
WIRELESS HID+MAC					

WIRELESS DATA TRANSFER CONNECTION

SWITCH ON WIRELESS module push button 2 sec;

In **WIRELESS TO MDS** non-stop blinking on display up to connection to MDS app and selecting **STANDARD** or **ECO** sub-mode. **ECO recommended for battery economy**

In **STANDARD** submode data transfer 4 times/sec and all time on display.

Push button to save data to MDS app or use buttons and Timer inside app.

In **ECO (GATT)** submode caliper ready to transfer data any time with no indication. Push button to save data on MDS app.

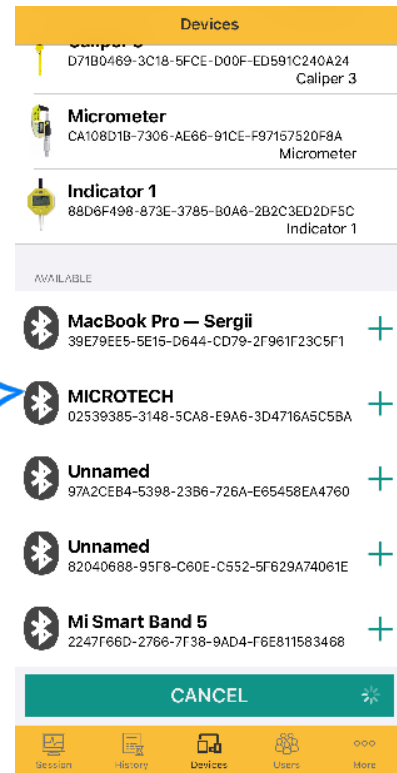
For selecting next mode push 5 sec.

WIRELESS HID and **WIRELESS HID+MAC** 2 sec on display and will be ready for searching on Tablet, Smartphone or Computer Bluetooth connections.

After successful connection save data to customers app with push button.

Add MICROTECH instruments to DEVICES list:

- Switch on the MICROTECH instrument.
- Activate Wireless mode on **SwissMet** instrument.
- Open DEVICES menu in MDS App and TAP SEARCH button
- Wireless devices around the Smartphone will be displayed.
- Find desired device with MICROTECH name and **+** button in app to add it.
- You can add any qty of instruments to Device list.

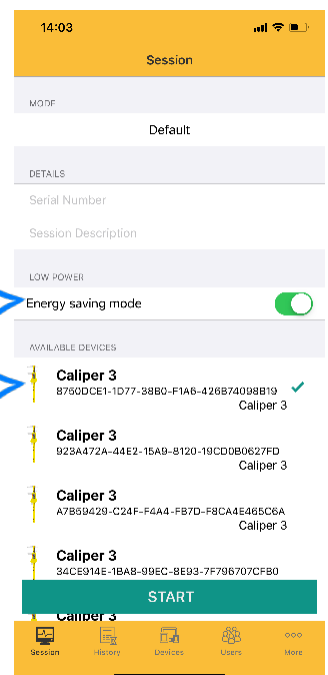


Start SESSION:

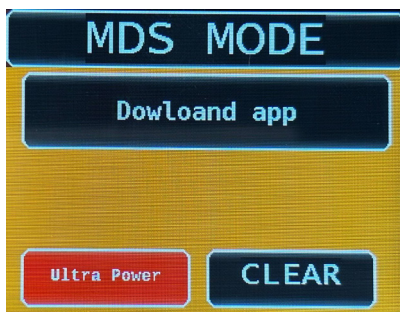
- Select one of available devices (added to devices list before)
- For using **SwissMet** Wireless instruments recommended to select «**ENERGY SAVING MODE**».
- Don't use «**Energy saving mode**» with DataMet instruments

Energy saving mode selection

Instrument selection



Activate MDS MODE mode for **DataMet** instruments

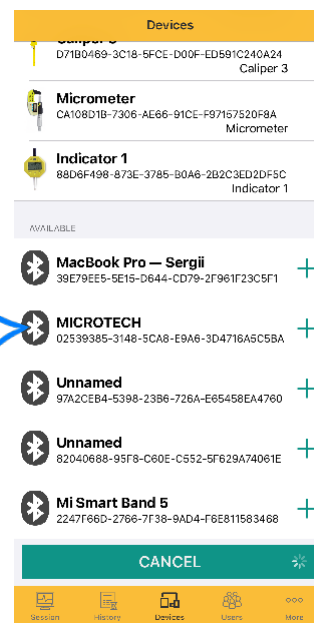


← MDS MODE active

- The device will appear on «Available devices» area
- Move selected instrument from «Available devices» area to «Activated devices» area.
- Activate Auto Synchronization to automatic activating switched on MICROTECH devices
- Select Filtering device mode in Connection menu to view only MICROTECH instruments.

Add MICROTECH instruments to DEVICES list:

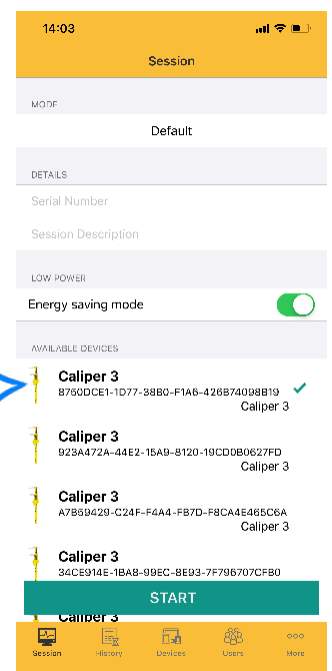
- Switch on the MICROTECH **DataMet** instrument. Activate Wireless MDS MODE on instrument.
- Open DEVICES menu in MDS App and TAP SEARCH button
- Wireless devices around the Smartphone will be displayed.
- Find desired device with MICROTECH name and + button in app to add it.
- You can add any qty of instruments to Device list.



Start SESSION:

- Select one of available devices (added to devices list before)
- Don't use «Energy saving mode» with DataMet instruments

Instrument selection

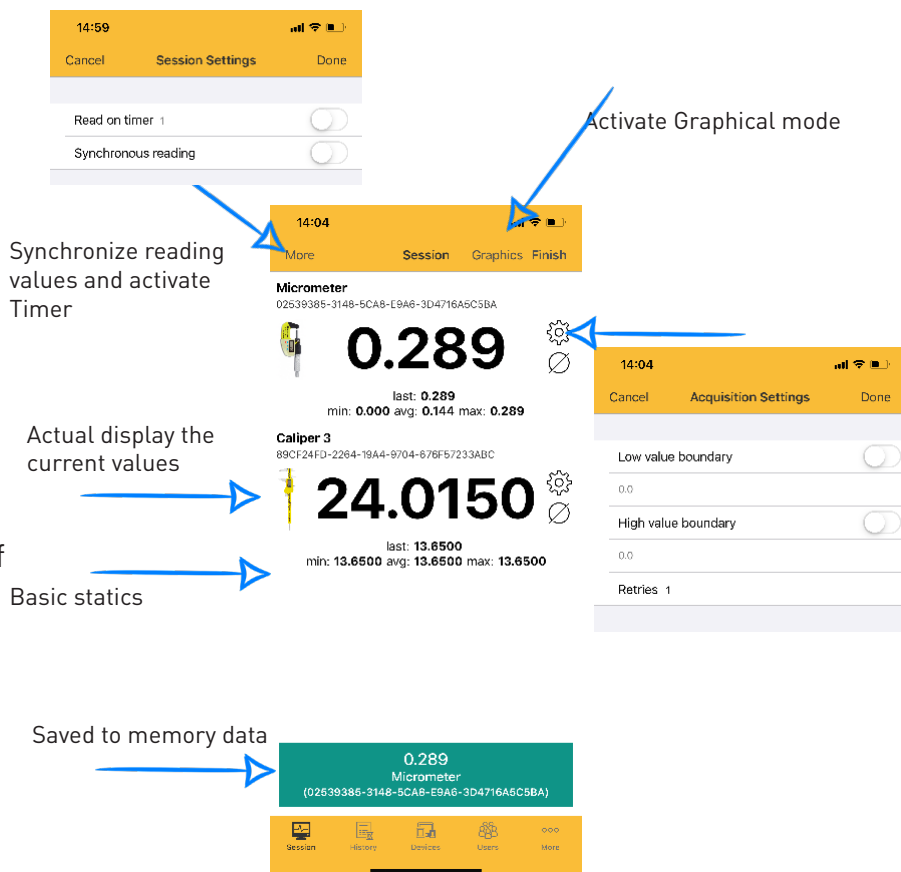


MEASURING PROCESS AND DATA SAVING

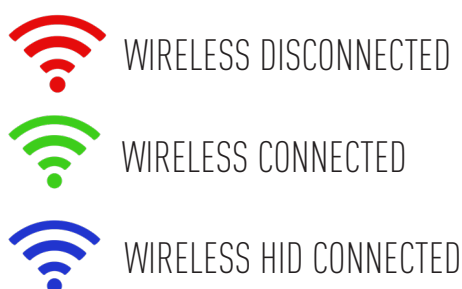
When SESSION started you can receive data from connected instruments.

In **MDS MODE** (data transferring non-stop 4 times/sec) for saving value:

- press the button or tap Touchscreen on instruments
- tap to actual value area on MDS App
- save values by Timer on App or instrument
- receive values from internal memory of instruments



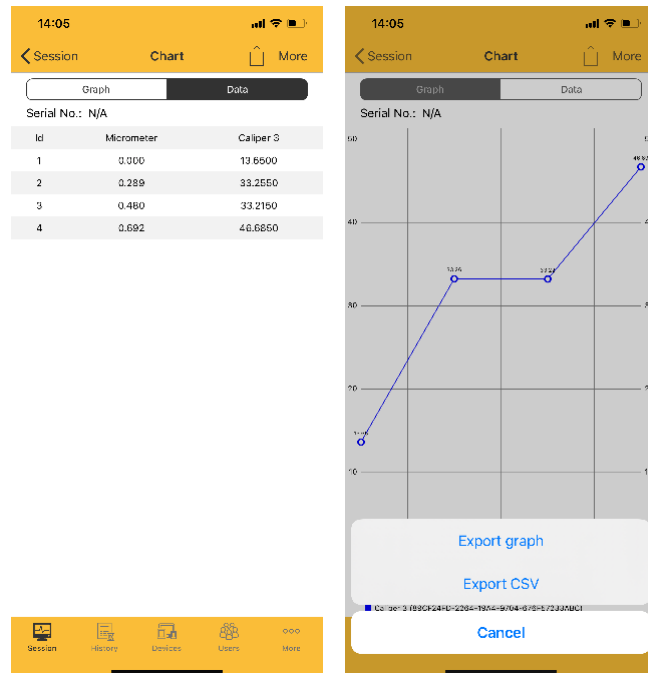
CONNECTION STATUS INDICATION



GRAPH AND DATA MODE

Tap Graph button to activate the Graphical mode.

- view graph
- export graph
- view and export actual data



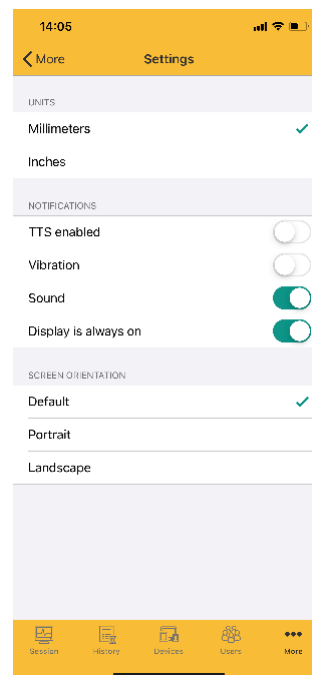
HISTORY

You can save current SESSION to HISTORY. All saved sessions and values in HISTORY can be viewed and exported.

Edit	History
Sergii Serial No.: N/A Mode: Default Started: 14:04:10 19.07.2021 Finished: not finished	
Sergii Serial No.: N/A Mode: Default Started: 11:53:57 29.06.2021 Finished: 11:54:09 29.06.2021	
Sergii Serial No.: N/A Mode: Default Started: 13:30:29 17.05.2021 Finished: 13:45:52 17.05.2021	
Sergii Serial No.: N/A Mode: Default Started: 07:38:50 12.05.2021 Finished: 07:39:43 12.05.2021	
Sergii Serial No.: N/A Mode: Default Started: 14:02:01 05.04.2021 Finished: 14:02:48 05.04.2021	
Sergii Serial No.: N/A	

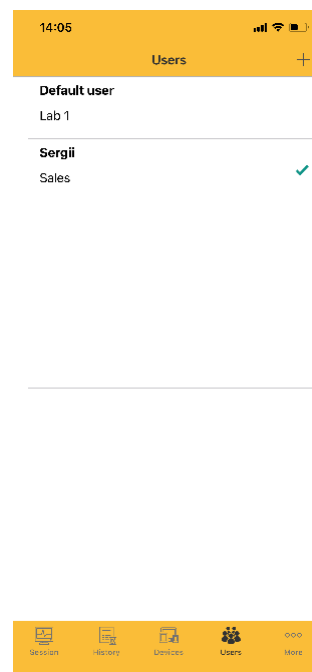
SETTINGS:

Use SETTINGS menu to select Language, Units (Metric or inch system), TTS settings (Voice mode), Display rotation, Backlight, etc.



ACCOUNTS:

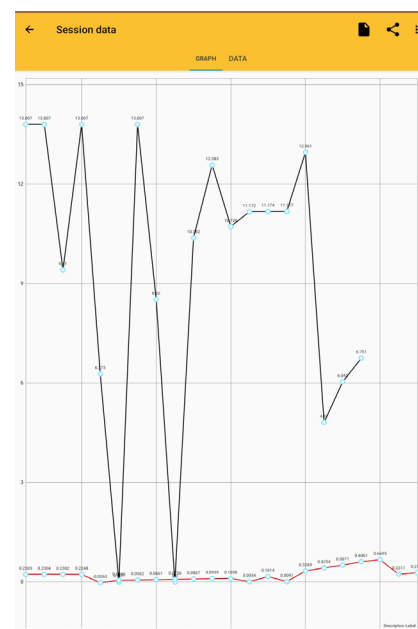
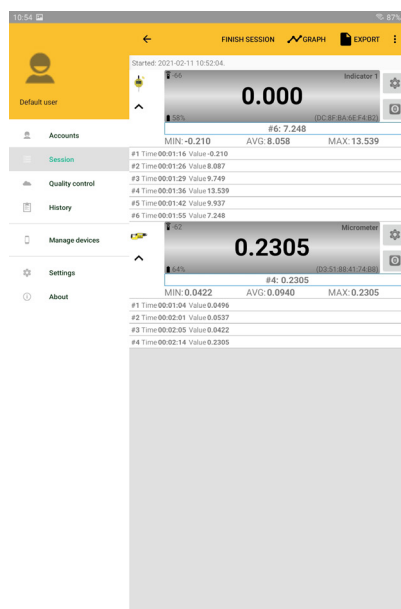
You can create users account by account menu. Info about Users displaying in measuring History. Measuring history can be associate with Users.



- **FREE** MDS application for Android
- MDS application can be downloaded on Google play
- For connection with **DataMet** / **WIRELESS SwissMet** instruments
- Standard and Energy saving mode (for **WIRELESS SwissMet** instruments)
- Up to 8 connections **DataMet** / **WIRELESS SwissMet** instruments at the same time
- **Functions:** Go/NoGo, Timer, Linear correction, Statistics mode, Data Export, Graphic, Voice mode, User manager, Graphical mode
- **NO USB-DONGLE REQUESTED**



	MDS for Android
	FREE
	299100040
Platform	Android 6.0 +
Instruments connection	DataMet / WIRELESS SwissMet
Max. instruments	8
mm/inch conversion	•
Go/NoGo functions	•
Graphical mode	•
Reading on Timer	•
Measuring history	•
Save data to xls	•
Save data to csv	•
Save graph	•
User manager	•
Instrument battery status	•
Voice mode	•
Multilanguage	12 languages



VIDEO

DEMO video with Installation, Connection and Measuring process



VIDEO

APP INSTALLATION

Install the latest MDS App from GooglePlay.

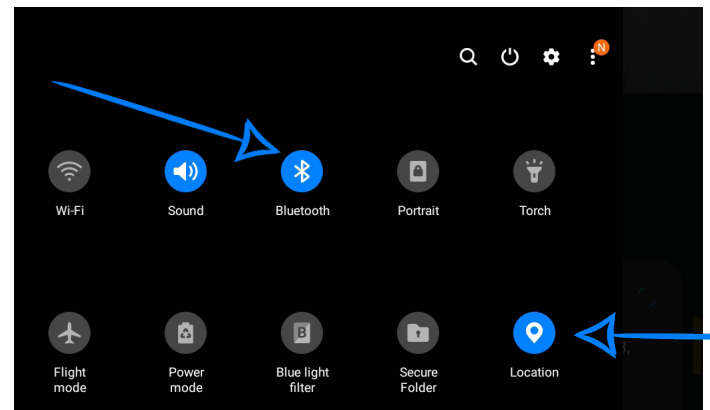


DOWNLOAD
MDS app ANDROID



APP ACCESS

Confirm application access to Bluetooth module of Smartphone.
Make sure that Bluetooth and Location are switched on (App request it to receiving data from Wireless and DataMet MICROTECH instruments)



INSTRUMENTS CONNECTION

DATAMET INSTRUMENTS CONNECTION

- The distance between the DataMet MICROTECH instrument and the Android device is 7-50 meters depends on transfer mode and premises conditions
- All MICROTECH DataMet instruments with MICS system has internal memory. It's possible to collect data to memory and transfer all data to your device with no data losing to any distance.
- DataMet MICROTECH instruments have only **MDS MODE** of Wireless data transfer:
 - non-stop data transfer 4 value/sec.



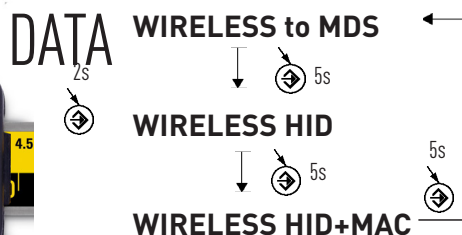
WIRELESS SWISSMET INSTRUMENTS CONNECTION

- Distance between the Wireless MICROTECH instrument and Android device is 5-25 meters depends of transfer mode and premises conditions
- MICROTECH Wireless instruments have 2 modes of data transfer:
 - MDS MODE**
 - non stop data transfer 4 times/sec
 - CR2032 battery works in non stop data transfer up to 100h
 - ECONOMY MODE**
 - data transfer only by Wireless button press
 - CR2032 battery works in this mode up to 6 months



We recommend to use ECONOMY MODE for MICROTECH Wireless instruments

ACTIVATE WIRELESS to MDS app on WIRELESS SwissMet instrument
SWITCH on ECO sub mode on MDS app ANDROID ECO recommended for battery



← **ACTIVATE WIRELESS to MDS app**



MICROTECH caliper with Built-in Wireless data output module for transfer results

MODE	TRANSFER DATA	Switch ON	Switch OFF	Select MODE	DATA send
WIRELESS TO MDS	STANDARD	MICROTECH MDS app Windows, Android, iOS, MacOS	2s. auto switch off when disconnect	STANDARD or ECO in MDS app	indic. non stop or on MDS app
	ECO (GATT)	all time active			no
WIRELESS HID	Direct to any customer app (like keyboard)	2s auto switch off when disconnect or no data 10 min	5s. and connect BT on PC or Tablet	2 sec	push
WIRELESS HID+MAC					

WIRELESS DATA TRANSFER CONNECTION

SWITCH ON WIRELESS module push button 2 sec;

In **WIRELESS TO MDS** non-stop blinking on display up to connection to MDS app and selecting **STANDARD** or **ECO** sub-mode. **ECO recommended for battery economy**

In **STANDARD** submode data transfer 4 times/sec and all time on display.

Push button to save data to MDS app or use buttons and Timer inside app.

In **ECO (GATT)** submode caliper ready to transfer data any time with no indication. Push button to save data on MDS app.

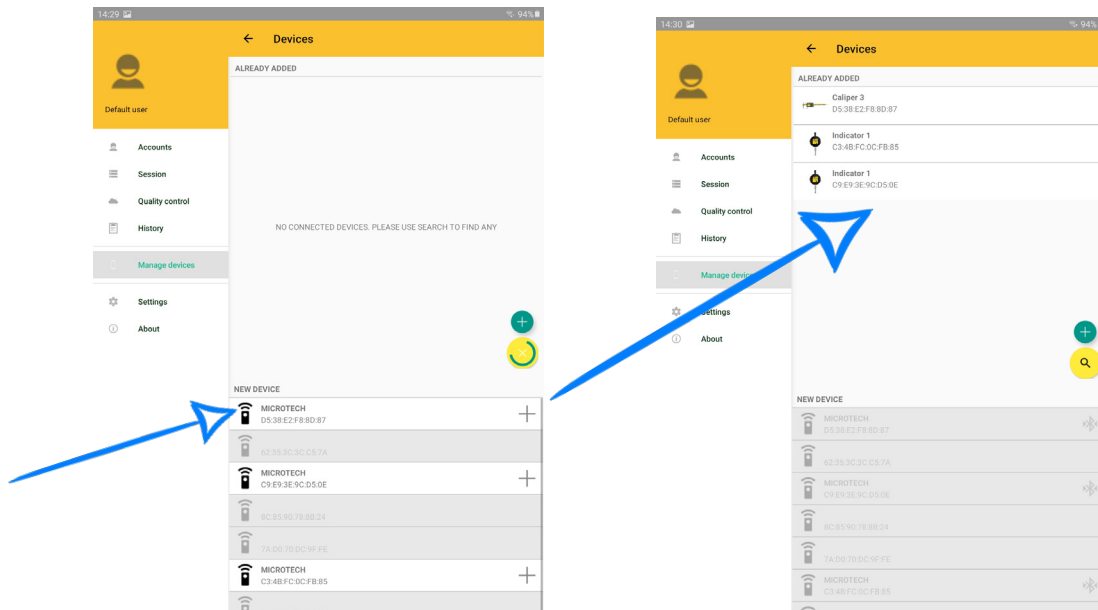
For selecting next mode push 5 sec.

WIRELESS HID and **WIRELESS HID+MAC** 2 sec on display and will be ready for searching on Tablet, Smartphone or Computer Bluetooth connections.

After succesfull connection save data to customers app with push button.

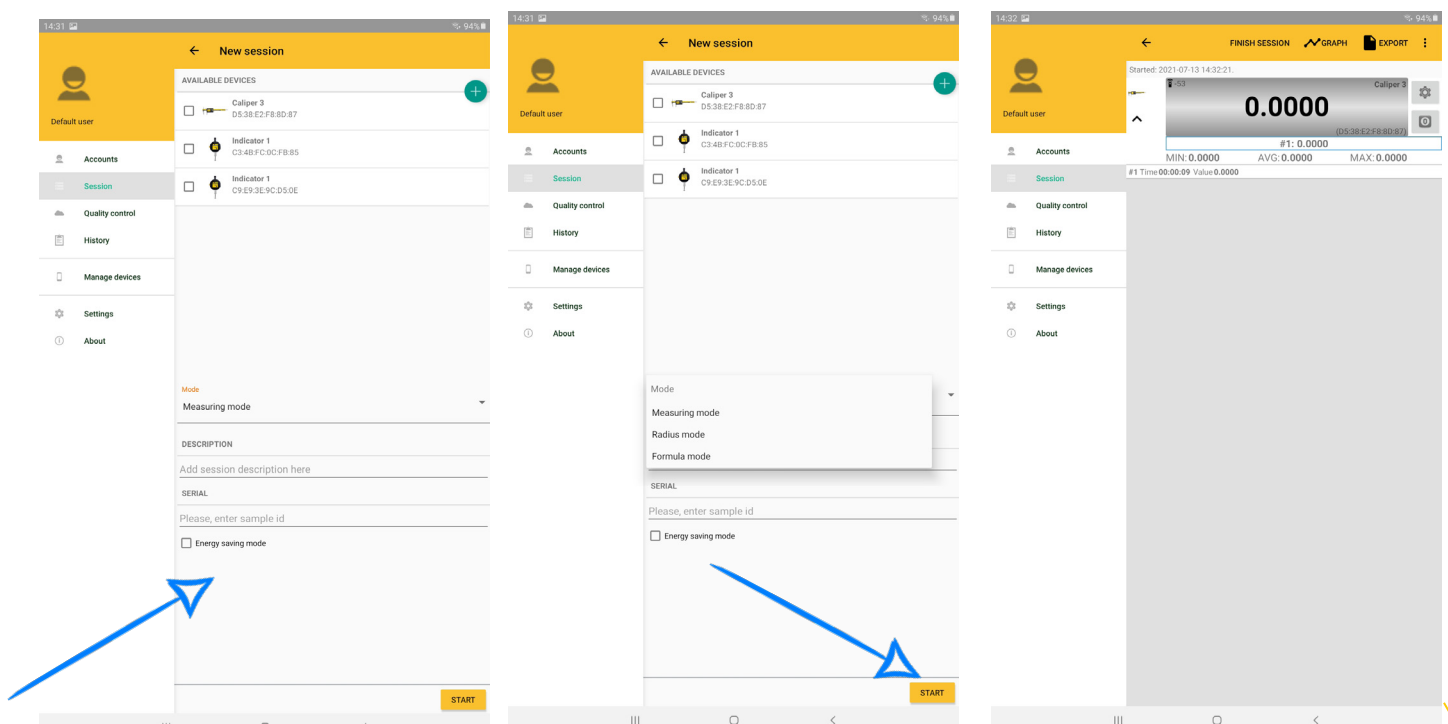
Add MICROTECH instruments to DEVICES list:

- Switch on the MICROTECH **SwissMet** instrument. Activate Wireless mode on instrument.
 - Open MANAGE DEVICES menu in ANDROID MDS App and Press SEARCH button
 - Wireless devices around the Tablet or Smartphone will be displayed.
- If you can't find any Wireless device around - check App setting (Bluetooth and Location must be switch on)
- Find desired device with MICROTECH name and MAC adress and touch **+** button in app to add it.
 - You can add any qty of instruments to Device list.

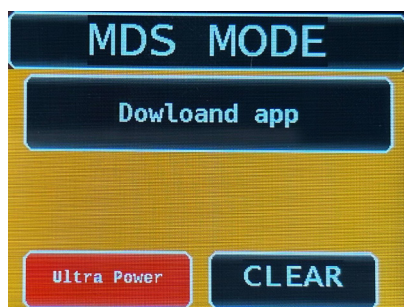


Start SESSION:

- Select one of available devices (added to devices list before, if necessary press + to add more)
- For using **SwissMet Wireless** instruments recommended to select «**ENERGY SAVING MODE**».



Activate MDS MODE mode for **DataMet** instruments



← MDS MODE active

- The device will appear on «Available devices» area
- Move selected instrument from «Available devices» area to «Activated devices» area.
- Activate Auto Synchronization to automatic activating switched on MICROTECH devices
- Select Filtering device mode in Connection menu to view only MICROTECH instruments.

CONNECTION STATUS INDICATION



WIRELESS DISCONNECTED



WIRELESS CONNECTED



WIRELESS HID CONNECTED



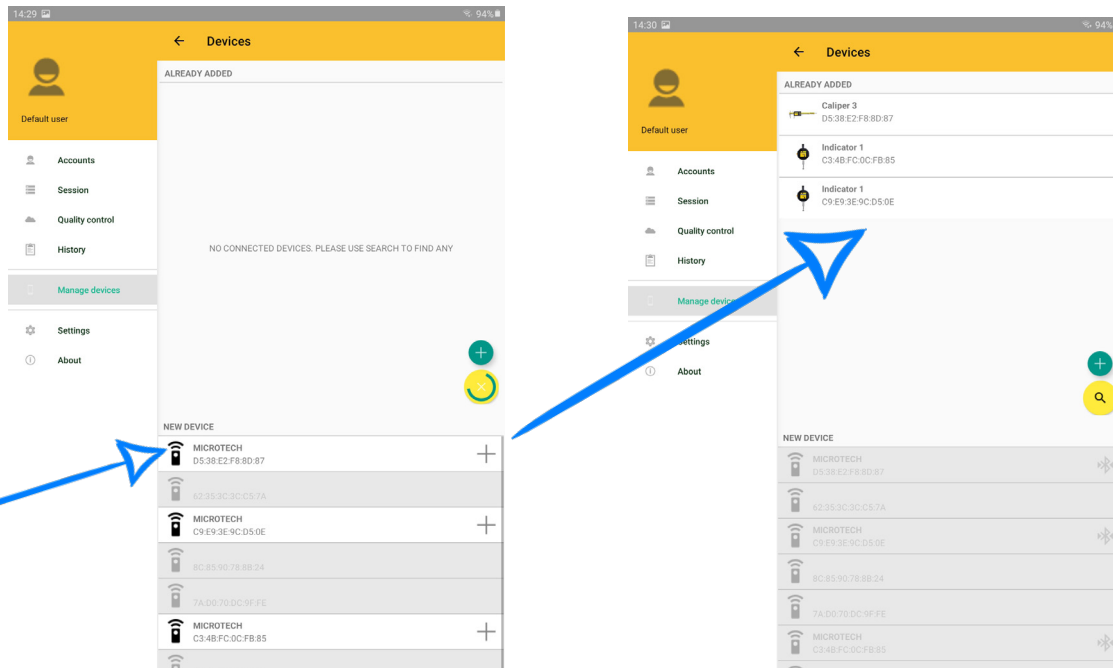
USB HID DISCONNECTED



USB HID CONNECTED

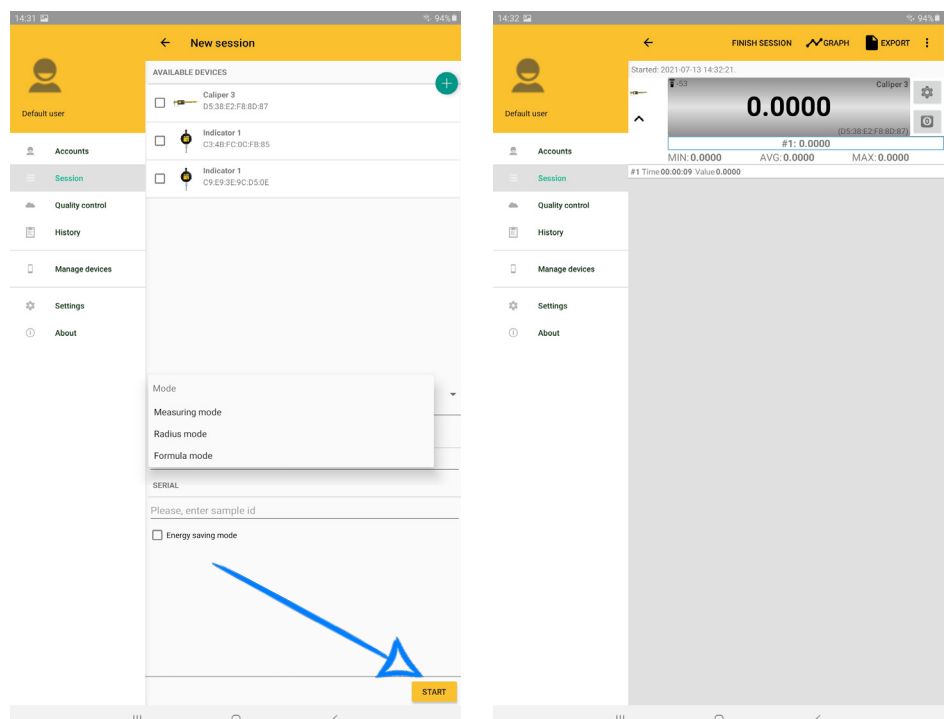
Add MICROTECH instruments to DEVICES list:

- Switch on the MICROTECH **DataMet** instrument. Activate MDS MODE on instrument.
 - Open MANAGE DEVICES menu in MDS ANDROID App and Press SEARCH button
 - Wireless devices around the Tablet or Smartphone will be displayed.
- If you can't find any Wireless device around - check App setting (Bluetooth and Location must be switch on)
- Find desired device with MICROTECH name and MAC adress and touch **+** button in app to add it.
 - You can add any qty of instruments to Device list.



Start SESSION:

- Select one of available devices (added to devices list before, if necessary press + to add more)
- Don't use «Energy saving mode» with **DataMet** instruments



MEASURING PROCESS AND DATA SAVING

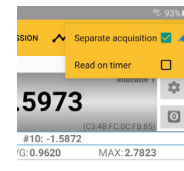
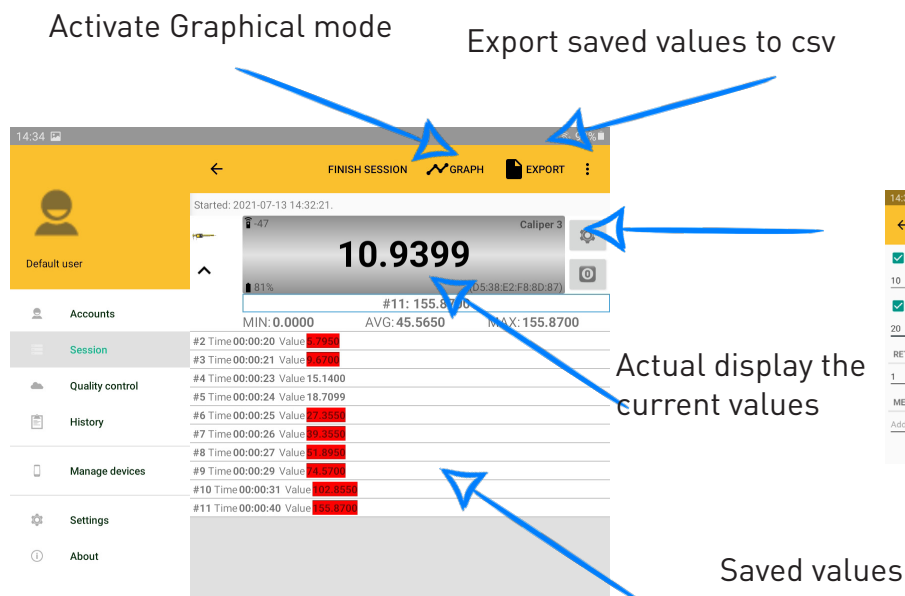
When SESSION started you can receive data from connected instruments.

In **MDS MODE** (data transferring non-stop 4 times/sec) for saving value:

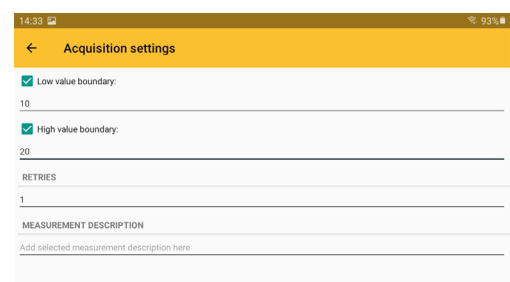
- press the button or tap Touchscreen on instruments
- tap to actual value area on MDS App
- save values by Timer on App or instrument
- receive values from internal memory of instruments

In **Energy saving mode** for saving values:

- Press Wireless button on instrument



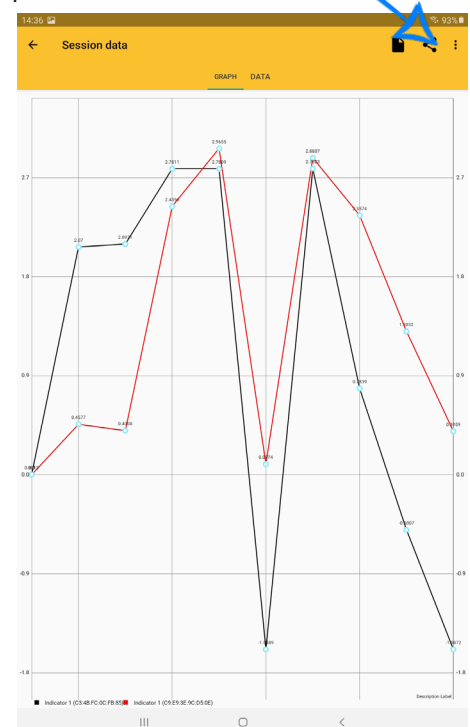
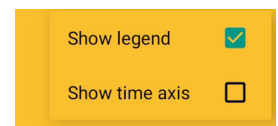
Synchronize reading values and activate Timer



GRAPH MODE

Tap Graph button to activate Graphical mode.

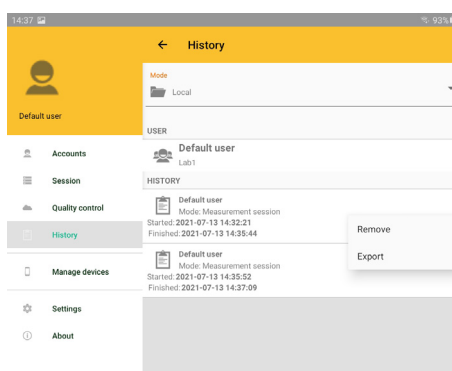
- possible to view online values updates on Graph
- or view the saved values from SESSION window
- graph settings gives possibility show legend and time axis on graph.
- export graphic in png format



HISTORY

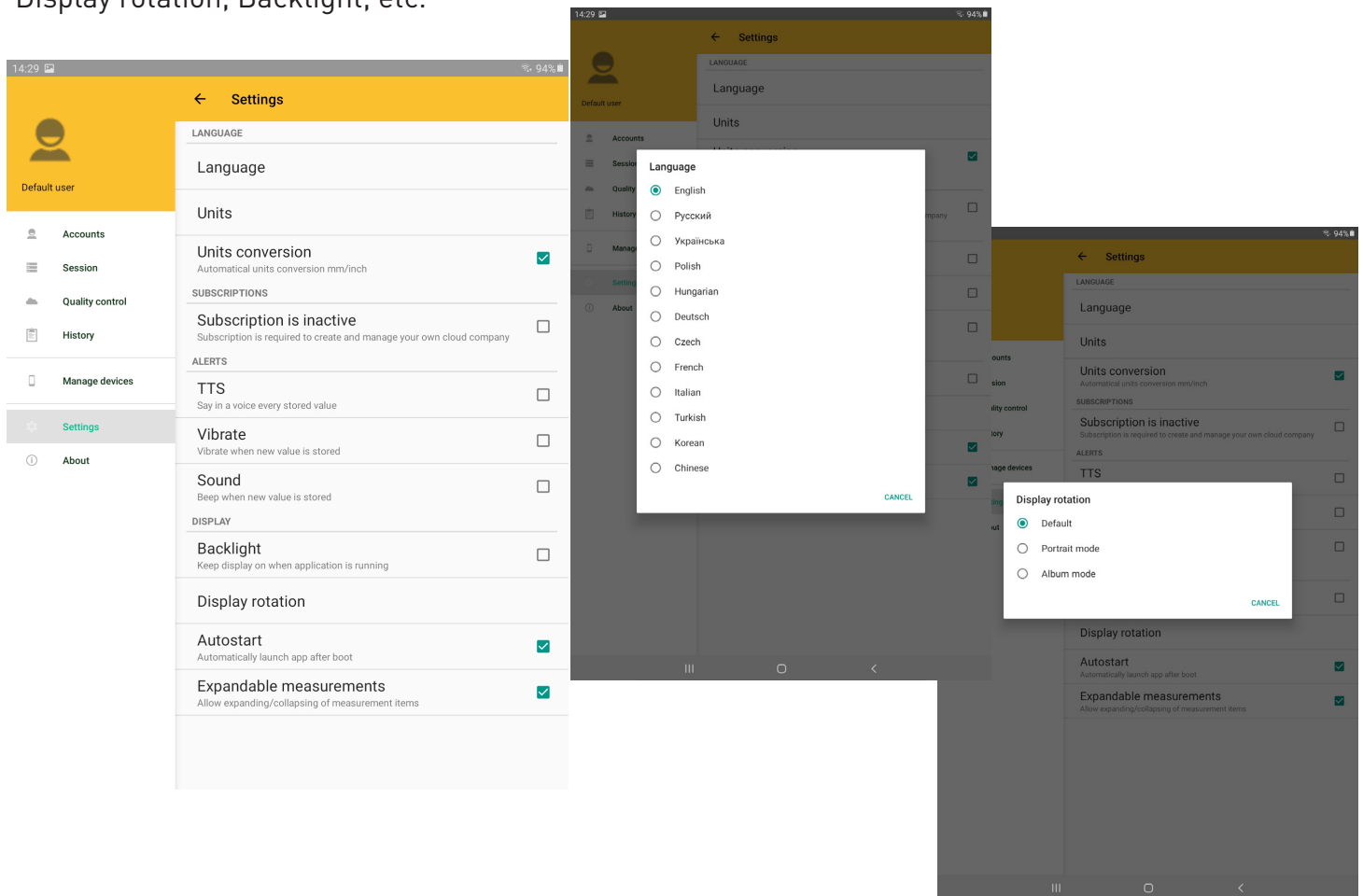
You can save current SESSION to HISTORY.

All saved sessions and values in HISTORY can be viewed and exported.



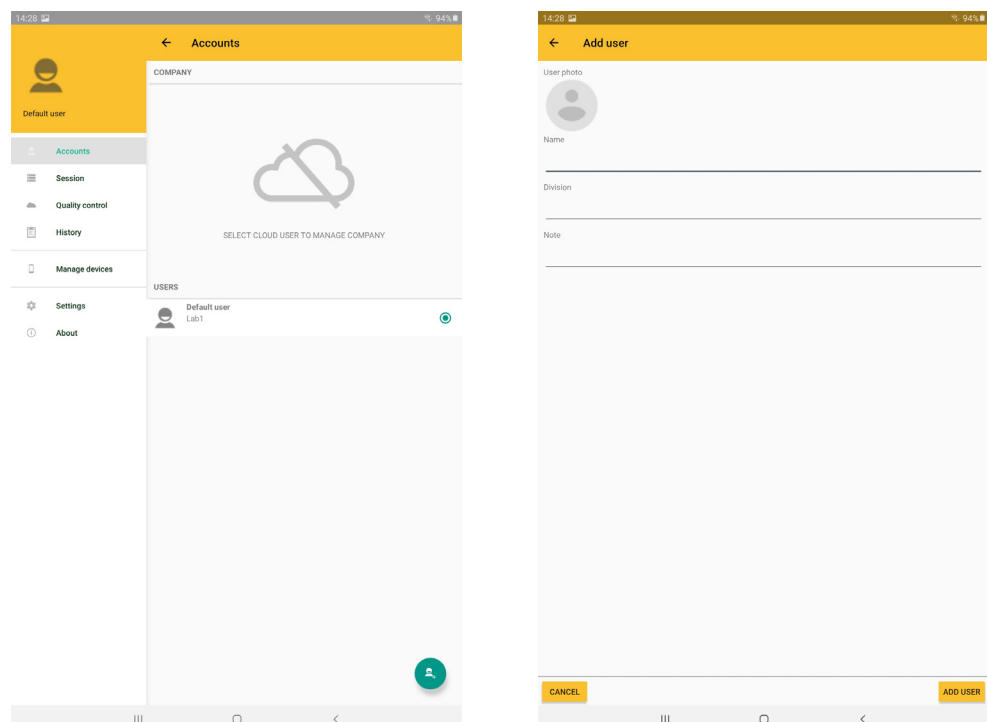
SETTINGS:

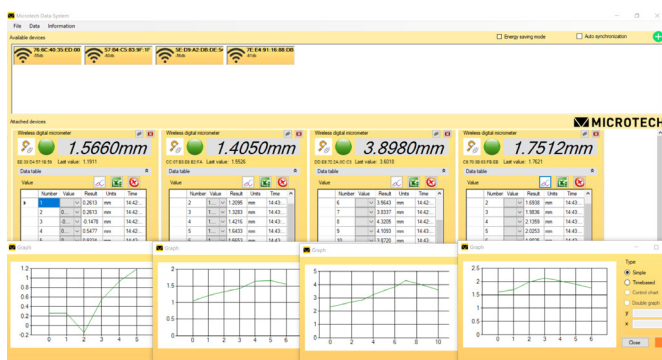
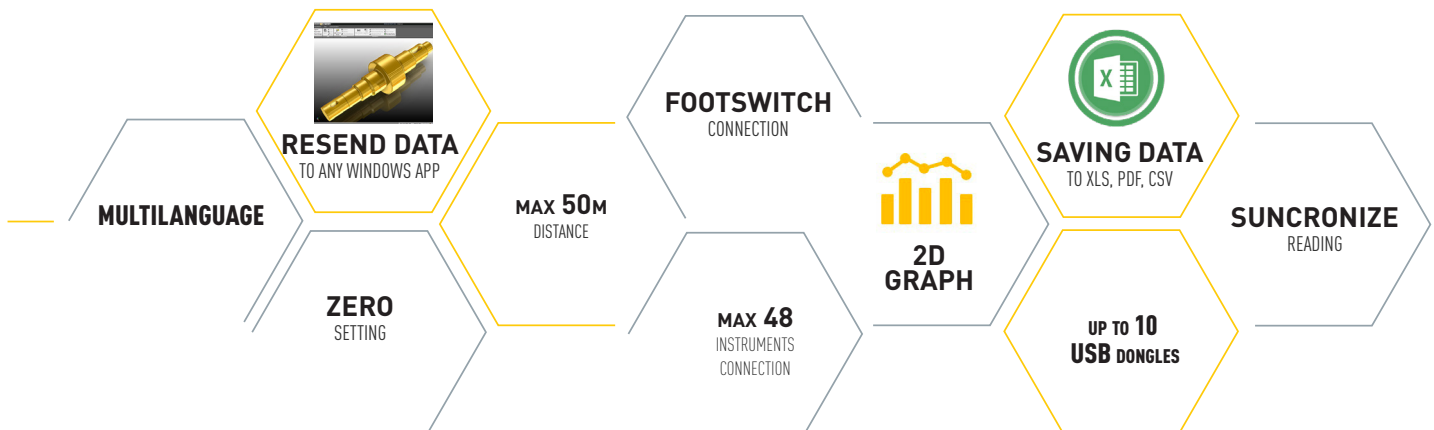
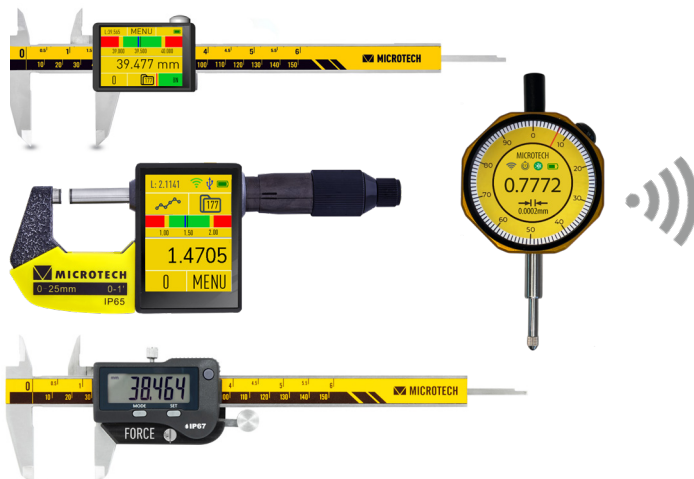
Use SETTINGS menu to select Language, Units (Metric/ inch system), TTS settings (Voice mode), Display rotation, Backlight, etc.



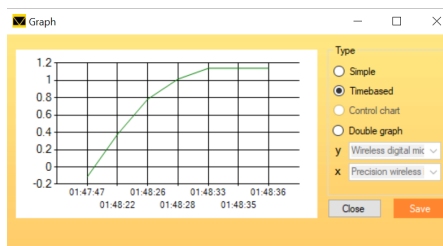
ACCOUNTS:

You can create users account by account menu.
Info about Users displaying in measuring History.
Measuring history can be associate with Users.

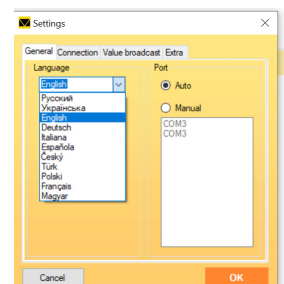




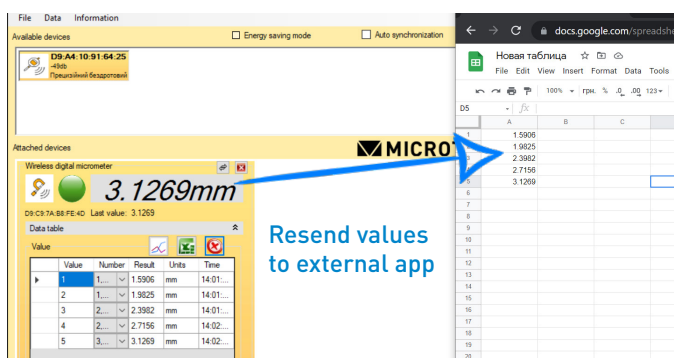
UP TO 48 **DATA**MET AND **WIRELESS** **SWISS**MET INSTRUMENTS



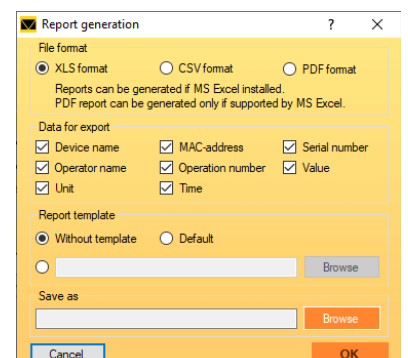
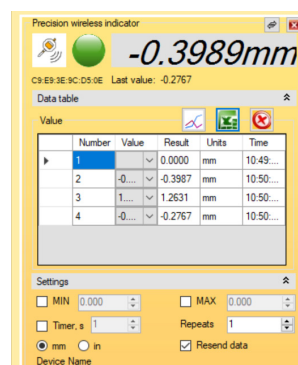
GRAPHICAL MODE



MULTILANGUAGE



ON-LINE RESEND DATA TO EXTERNAL APP'S



REPORT SAVING

- MDS app for Windows for **CONNECTION** with MICROTECH instruments (up to 48 instruments in PRO version)
- **FREE** version can be downloaded/ **STANDARD, OPTIMA & PRO** versions supplying on USB-stick
- Collecting data from MICROTECH instruments and ZERO setting
- Autoconnection, Data reading synchronizing, connection modes.
- On-line Export data to external programs (to Excel, SAP, Solidworks, etc). Data Format adjustable (dot/comma, symbols)
- Data Export (csv, pdf, xls formats),
- Graphical and 2D Graphical mode (saving in png format)
- **USB-DONGLE REQUESTED**
- Optional **DataMet** Buttons, Footswitch for collecting Data and setting ZERO.



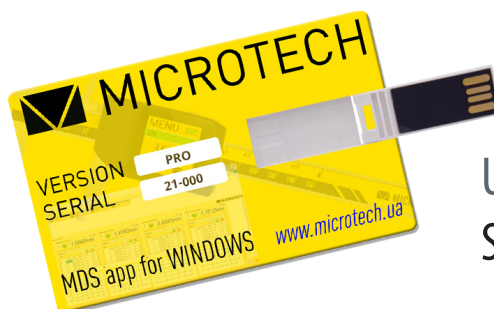
MDS app for Windows				
	FREE	STANDARD	OPTIMA	PRO
	299100530	299100550	299100560	299100570
Platform	Windows 7, 8, 10, 11			
Max. instruments connected	1	3	8	48
USB-dongles (max qty)	1	1	2	10
Instruments connection	DataMet / WIRELESS SwissMet			
Instrument ZERO setting (DataMet)		•	•	•
Standard/Energy saving mode	•	•	•	•
Autoconnection	•	•	•	•
Filtering MICROTECH devices	•	•	•	•
Data reading Synchronizing	•	•	•	•
User manager	•	•	•	•
WIRELESS Foot-Switch connection		•	•	•
WIRELESS Button connection		•	•	•
USB Foot-Switch connection		•	•	•
mm/inch conversion	•	•	•	•
Go/NoGo functions	•	•	•	•
Graphical mode			•	•
2D-Graphical mode				•
Timer	•	•	•	•
Resolution selection	•	•	•	•
Export to external programs	•	•	•	•
Save data to csv, xls, pdf		•	•	•
Save graph png			•	•
Multilanguage	10 languages			
Format	Download	USB-stick		



DOWNLOAD
MDS app WINDOWS



DOWNLOAD MDS APP **FREE**



USB-STICK WITH MDS APP
STANDARD, OPTIMA, PRO

DELIVERY SET

USB STICK



OPTIONAL

DATAmet BUTTON

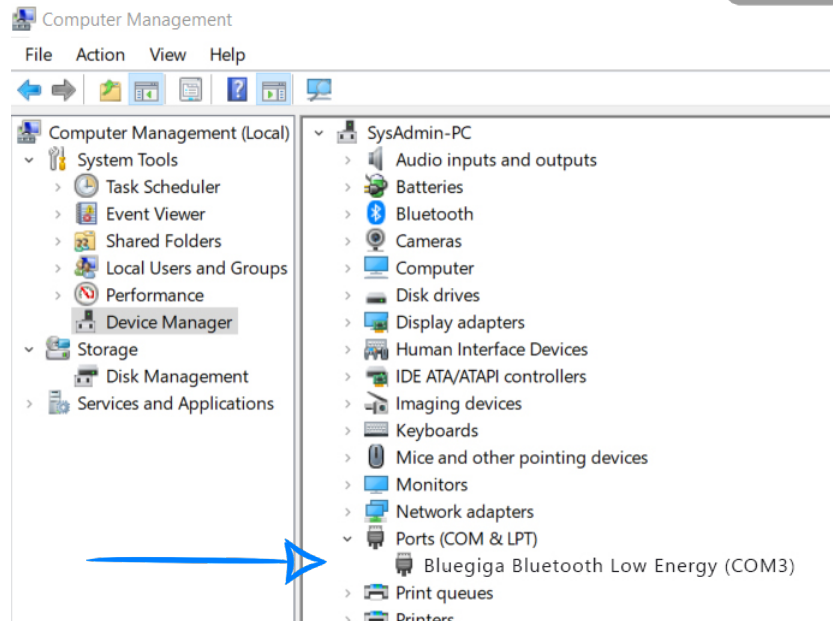


DATAmet FOOTSWITCH



USB DONGLE





To connect instruments to PC, it is necessary to use USB-dongle on PC (Item 299190001)

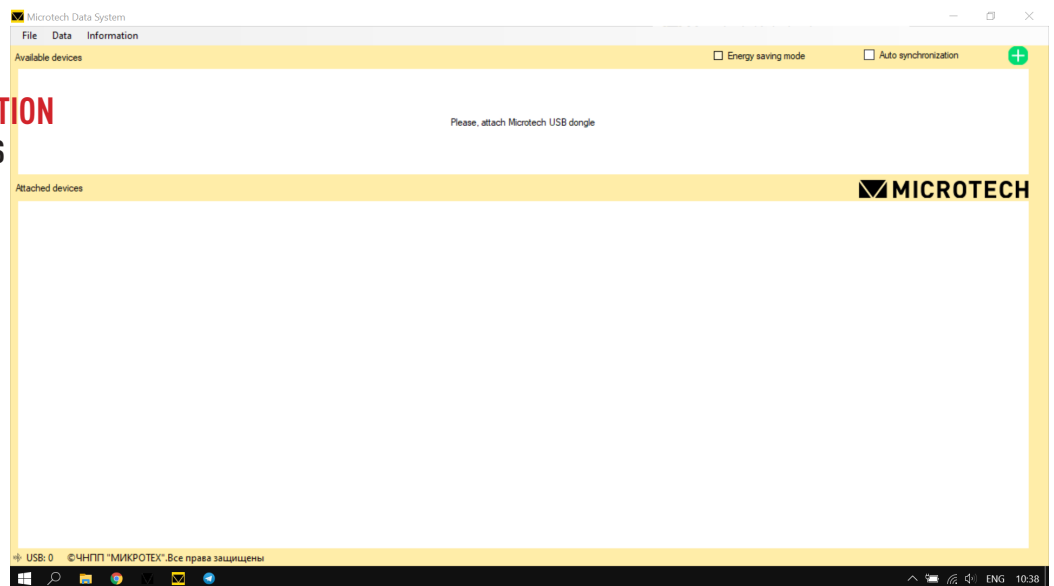
Connect USB -dongle to PC

-Check driver status on device manager

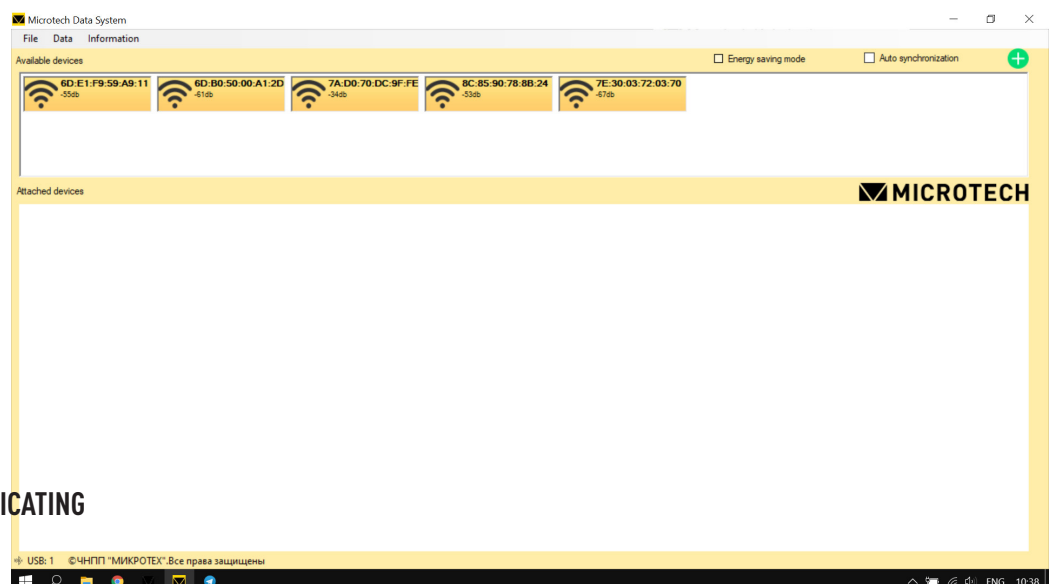
-In MDS software you can check how many USB-Dongle is active.

When USB-Dongle connected - all wireless devices around you will be displayed automatically

WITHOUT USB DONGLE CONNECTION
NO VISIBLE SURROUNDING WIRELESS
DEVICES



USB DONGLE CONNECTED
VISIBLE SURROUNDING WIRELESS
DEVICES

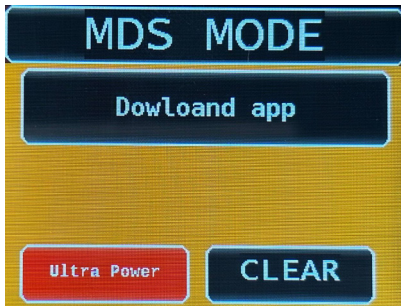


QTY OF CONNECTED USB-DONGLES INDICATING



Switch on Wireless data transfer on MICROTECH instruments *in DataMet instruments using menu;*

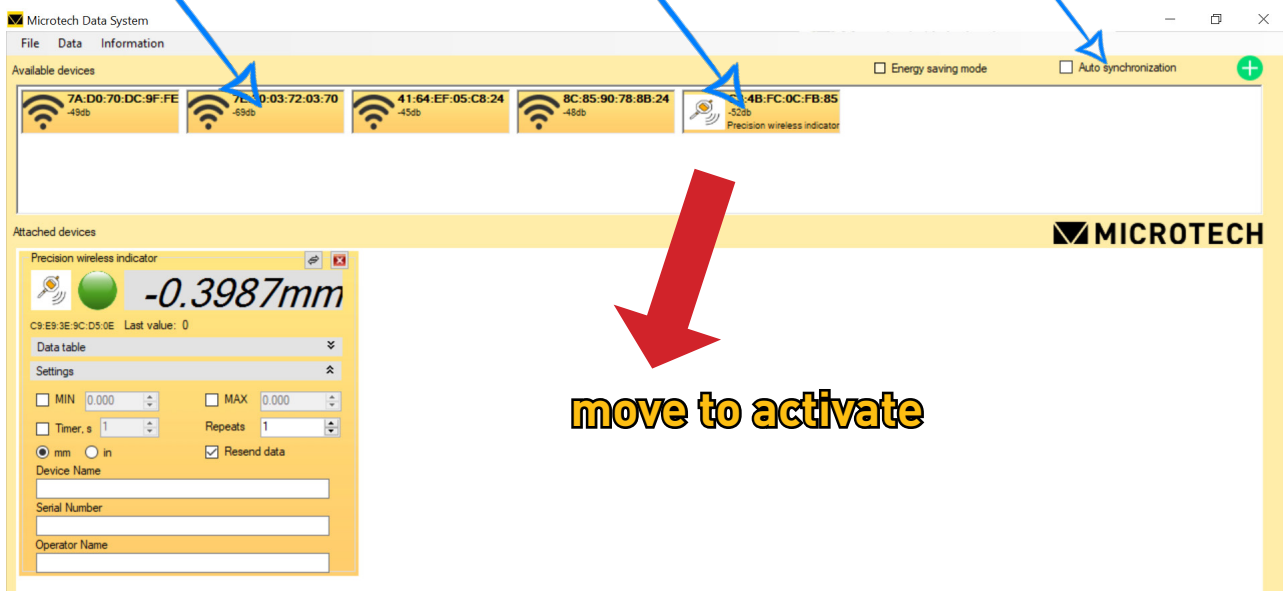
Activate MDS MODE mode for **DataMet** instruments



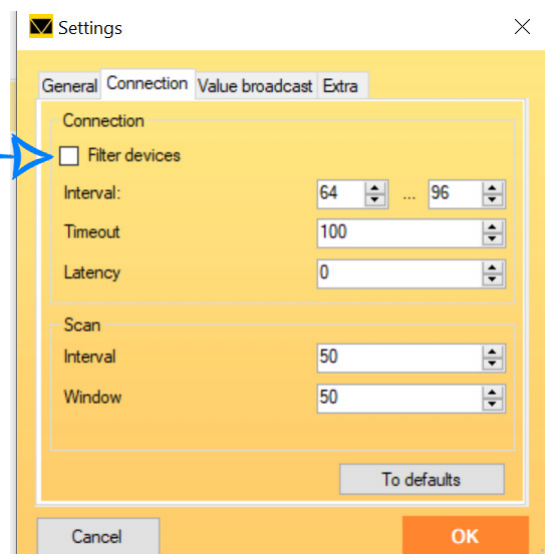
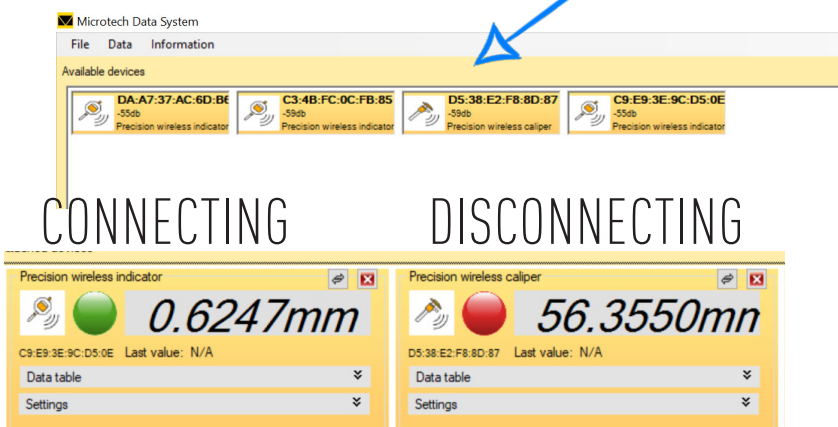
← MDS MODE active

- The device will appear on «Available devices» area
- Move selected instrument from «Available devices» area to «Activated devices» area.
- Activate Auto Synchronization to automatic activating switched on MICROTECH devices
- Select Filtering device mode in Connection menu to view only MICROTECH instruments.

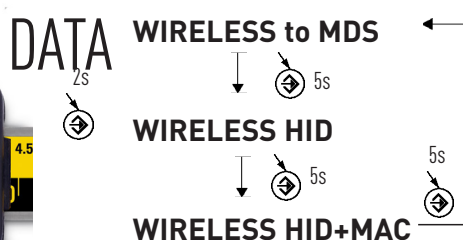
other WIRELESS devices MICROTECH instruments Activate Auto synchronization



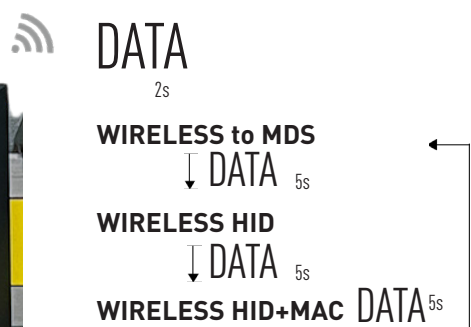
Select Filtering device mode in Connection menu to view only MICROTECH instruments in Available devices area



ACTIVATE WIRELESS to MDS app on WIRELESS SwissMet instrument
SWITCH on ECO sub mode on MDS app ANDROID ECO recommended for battery



← **ACTIVATE WIRELESS to MDS app**



MICROTECH caliper with Built-in Wireless data output module for transfer results

MODE	TRANSFER DATA	Switch ON	Switch OFF	Select MODE	DATA send
WIRELESS TO MDS	STANDARD	MICROTECH MDS app Windows, Android, iOS, MacOS	2s. auto switch off when disconnect	STANDARD or ECO in MDS app	indic. non stop or on MDS app
	ECO (GATT)	all time active			no
WIRELESS HID	Direct to any customer app (like keyboard)	2s auto switch off when disconnect or no data 10 min	5s. and connect BT on PC or Tablet	2 sec	push
WIRELESS HID+MAC					

WIRELESS DATA TRANSFER CONNECTION

SWITCH ON WIRELESS module push button 2 sec;

In **WIRELESS TO MDS** non-stop blinking on display up to connection to MDS app and selecting **STANDARD** or **ECO** sub-mode. **ECO recommended for battery economy**

In **STANDARD** submode data transfer 4 times/sec and all time on display.

Push button to save data to MDS app or use buttons and Timer inside app.

In **ECO (GATT)** submode caliper ready to transfer data any time with no indication. Push button to save data on MDS app.

For selecting next mode push 5 sec.

WIRELESS HID and **WIRELESS HID+MAC** blinking 2 sec on display and will be ready for searching on Tablet, Smartphone or Computer Bluetooth connections.

After succesfull connection save data to customers app with push button.

Switch on Wireless data transfer on **WIRELESS SwissMet** instruments by holding the button for 2 seconds



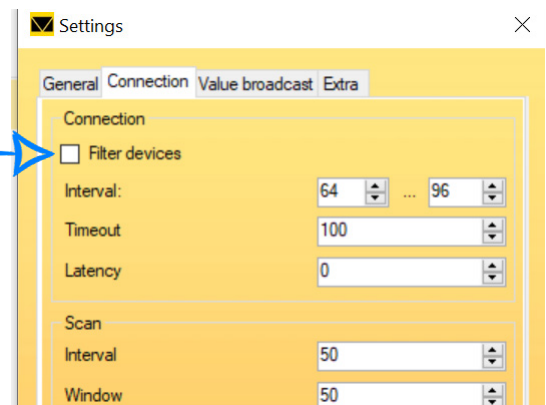
- The device will appear on «Available devices» area
- Move selected instrument from «Available devices» area to «Activated devices» area.
- Activate Auto Synchronization to automatic activating switched on MICROTECH devices
- Select Filtering device mode in Connection menu to view only MICROTECH instruments.

ECO recommended for battery economy

other WIRELESS devices MICROTECH instruments Activate Auto synchronization



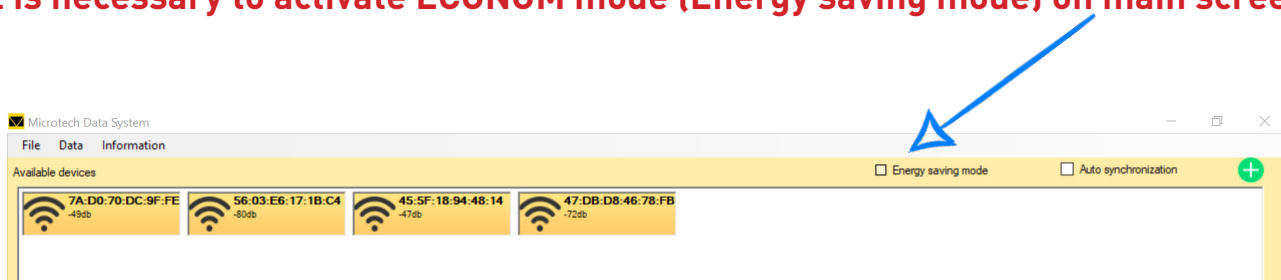
Select Filtering device mode in Connection menu to view only MICROTECH instruments in Available devices area



ECONOMY mode for WIRELESS SwissMet instruments

In economy mode the data transfer is carried out only by pressing the button

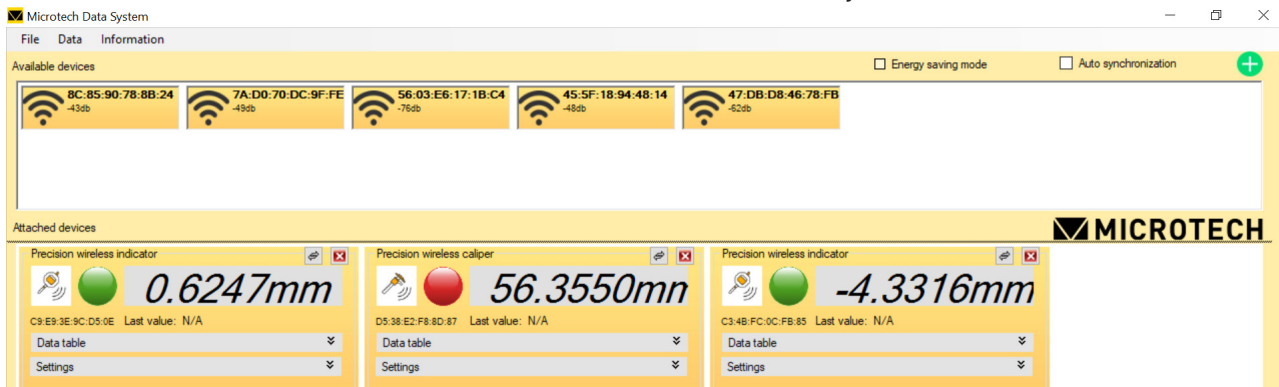
It is necessary to activate ECONOM mode (Energy saving mode) on main screen



Connect USB dongle and power on Wireless or DataMet devices.

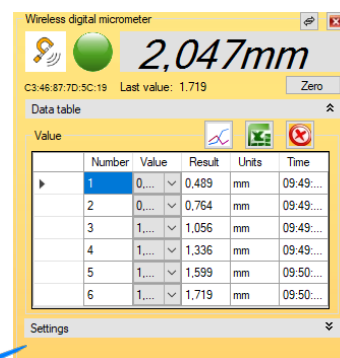
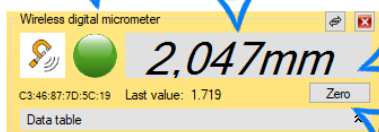
Wireless and DataMet devices will be appeared in Available devices area

To start data transfer move them to Attached devices area. If Auto synchronization is switched on, devices will be moved to Attached devices area automatically.

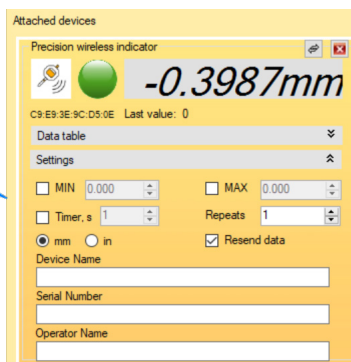


DEVICE WINDOW OPERATIONS

connection status
actual value

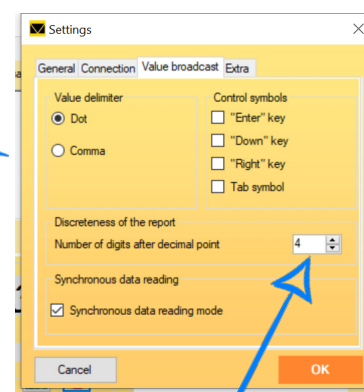
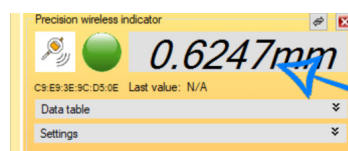
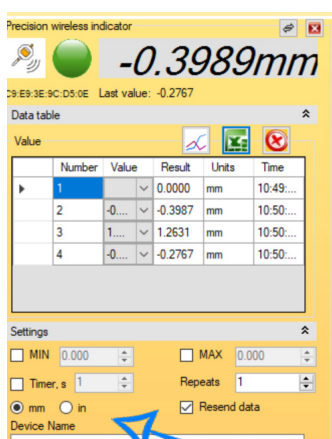


Data table area
with saved data from
instrument



Values settings:
- Limit's indication in table
- Timer function
- Resend data to other Windows
app activation
- Device extended info (Device
name, serial No, Operator info)

RESOLUTION & UNIT SELECTION



mm/inch selection

Resolution (Number of digit after decimal point)
selection in Setting menu

How to save values to table in DataMet devices:

- Push the button on DataMet device
- Tapping touch screen on DataMet device
- Timer activating on DataMet device
- Push the Data Window on MDS Windows app
- Timer activating on MDS Windows app
- External Button or Footswitch, connected to MDS Windows app



How to save values to table in SwissMet devices:

- Push the button on SwissMet device (Standard & ECO mode)
- Push the Data Window on MDS Windows app (Standard mode)
- Timer activating on MDS Windows app (Standard mode)
- External Button or Footswitch, connected to MDS Windows app (Standard mode)

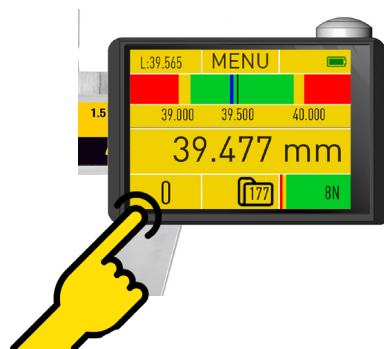
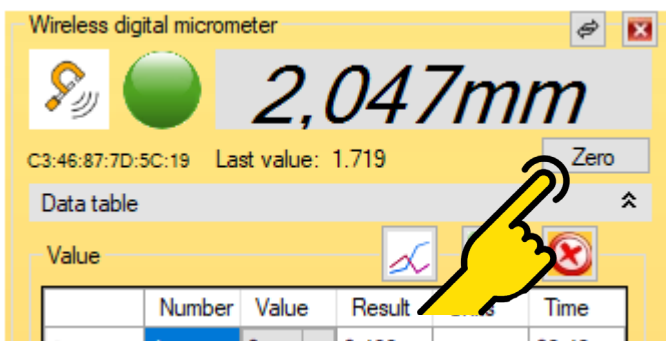


ZERO SETTING



How to set ZERO on DataMet devices:

- Set ZERO on DataMet device on Touchscreen
- Set ZERO on MDS Windows app
- Timer activating on MDS Windows app
- External Button or Footswitch, connected to MDS Windows app

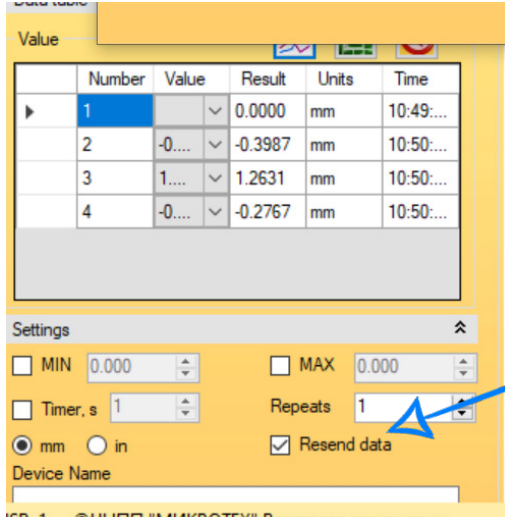


How to set ZERO on SwissMet devices:

- Set ZERO on SwissMet device by button

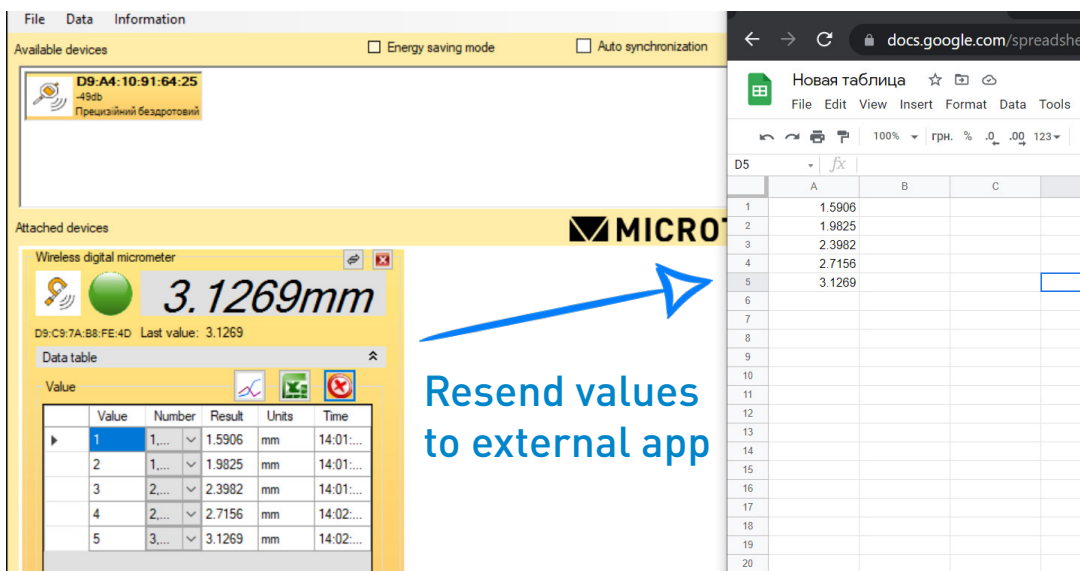
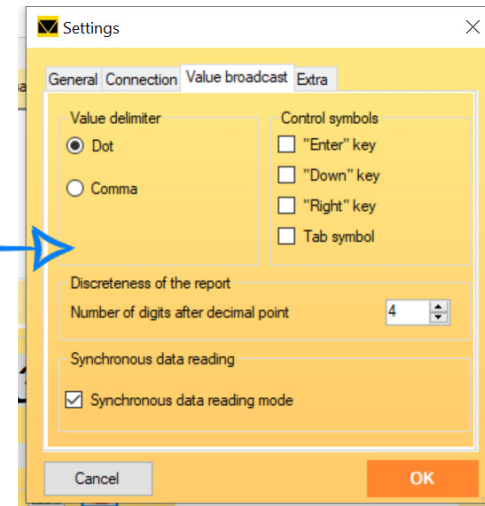


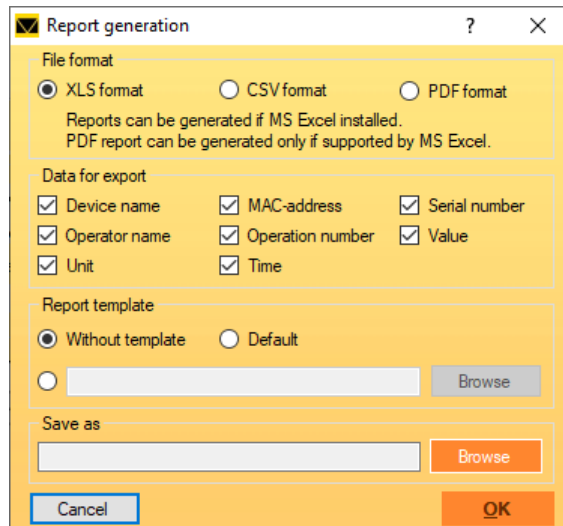
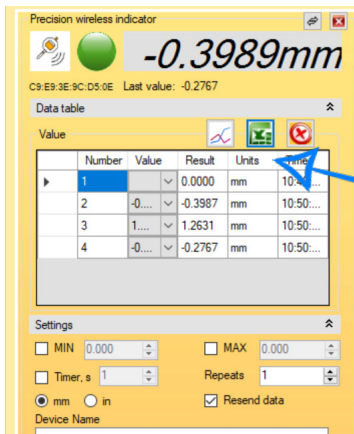
Actual values (receiving from instrument) can be Resend to any Windows app.
For example to Excel, Word, Solidworks, SAP and any other.



Activate Resend data

If necessary select value options (Dot/Comma) and Control symbol in Setting menu





Export saved data table values for external files

Select necessary to save columns on Data for export subsection

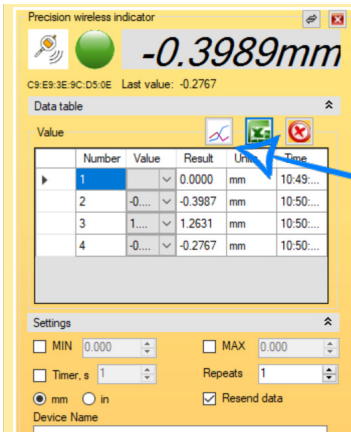
csv report can be generated in any Windows PC

xls report can be generated if MS Excel installed on your PC

pdf report can be generated only if supported by MS Excel (the latest versions)

	A	B	C	D
1	7/13/2021	11:01	AM	
2				
3	MAC-address:	C9:E9:3E:9C:D5:0E		
4	Device name:			
5	Serial number:			
6	Operator name:			
7	MIN:	-1.5554		
8	AVG:	-0.13		
9	MAX:	2.3685		
10	1	10:51:45.680	-1.5547	mm
11	2	10:51:46.884	-1.5551	mm
12	3	10:51:47.363	-1.5554	mm
13	4	10:51:48.719	1.645	mm
14	5	10:51:49.757	2.3685	mm
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29				

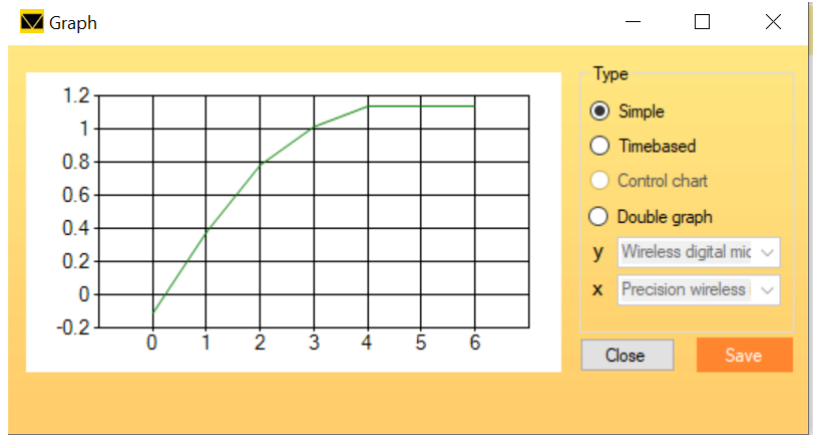
Example of exported xls file



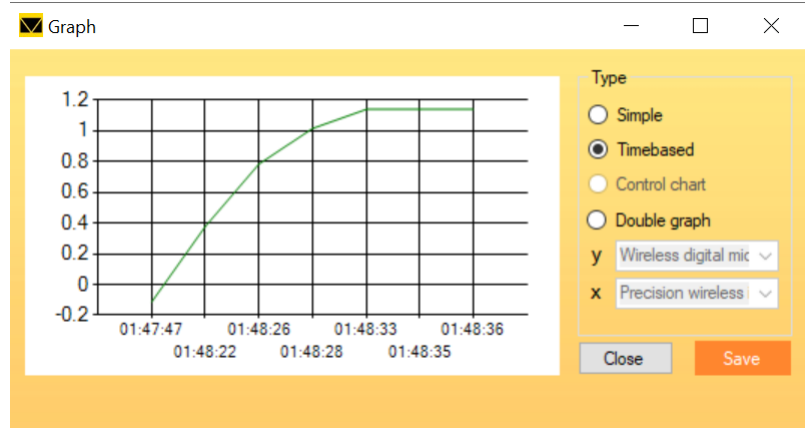
Export saved values to Graph mode
Graph can be saved to png format

Single Graph or Graph with Tutorial.

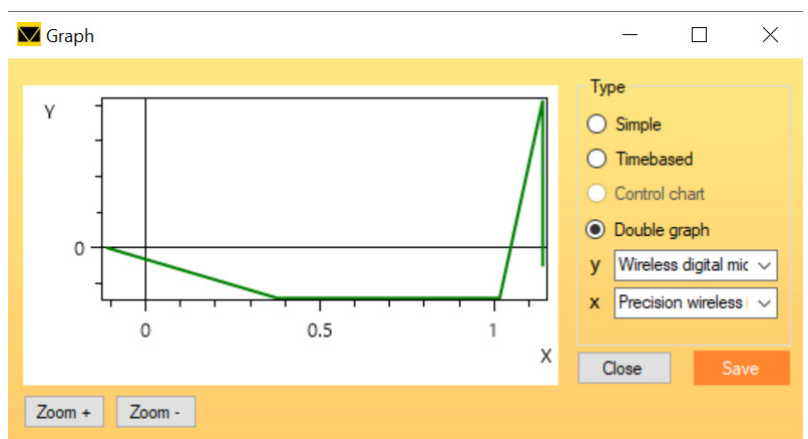
Simple Graph

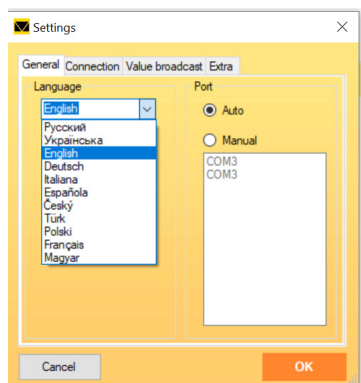


Simple Graph with Timebased

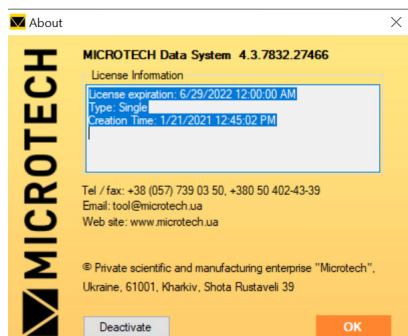


2D Doublegraph
For special measuring solutions

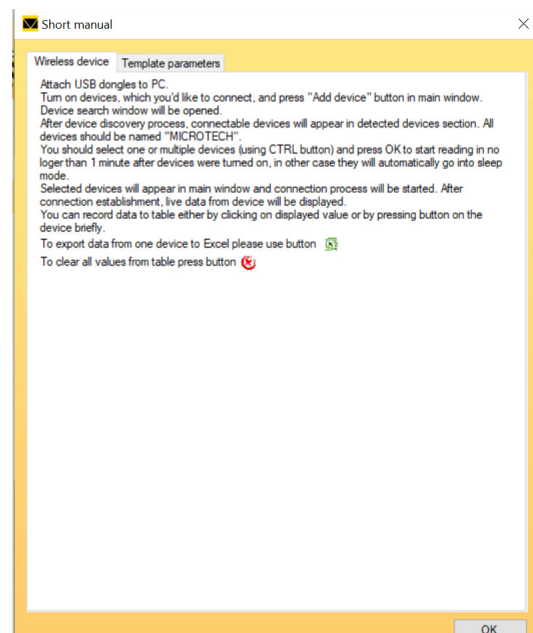




Language selection in Setting menu



MDS app versions info



Short guide in Information menu

ACTIVATE PRO version



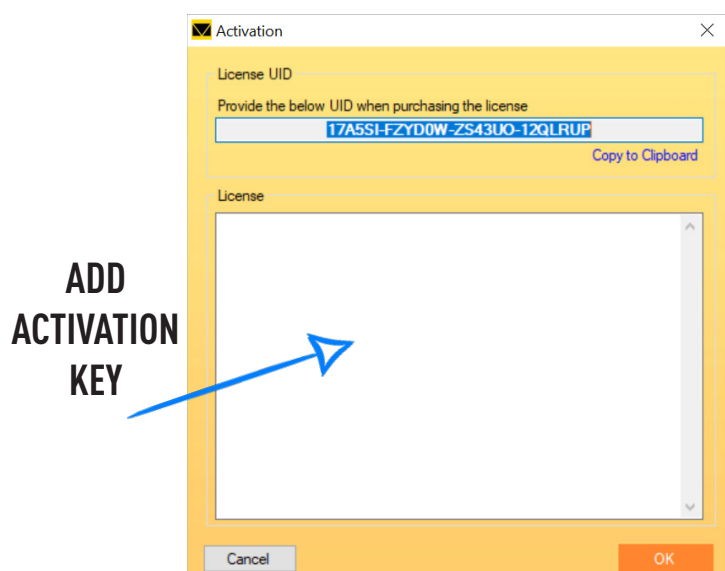
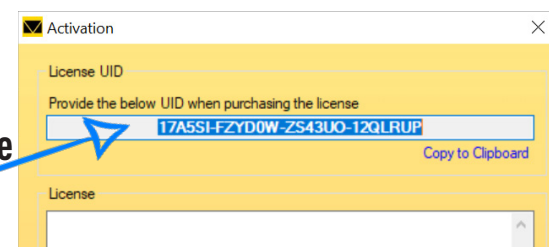
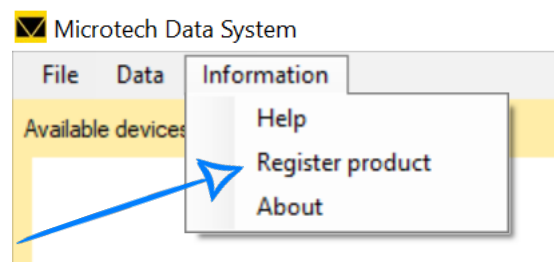
To activate PRO version (must be pre-paid with your local distributor)

1) Open Register product sub-menu

2) Copy and send activation **UID code** from application and **Serial No** from USB-drive to tool@microtech.ua

3) After checking we will send to your e-mail activation license key.

Add activation key to activation area and press OK.



MICROTECH **SwissMet** INSTRUMENTS have **WIRELESS HID** data output to transfer Data direct to any compatible operation systems and applications in keyboard mode.

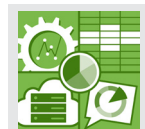
WIRELESS HID CONNECTION



NO DONGLE



TRANSFER DATA TO
CAD, SPC OR OTHER
SOFTWARE

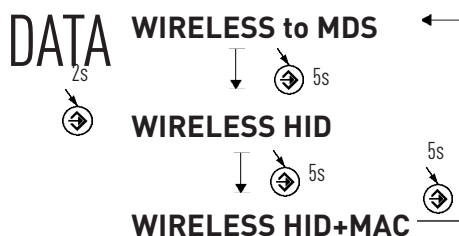


TRANSFER DATA TO
EXCEL OR OTHER
TABLE EDITORS



TRANSFER DATA TO
ANY BROWSWE OR
APP

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



MICROTECH caliper with Built-in Wireless data output module for transfer results

MODE	TRANSFER DATA	Switch ON	Switch OFF	Select MODE	DATA send
WIRELESS TO MDS	STANDARD	MICROTECH MDS app Windows, Android, iOS, MacOS	2s. auto switch off when disconnect	STANDARD or ECO in MDS app	blinking non stop or on MDS app
	ECO (GATT)	all time active			no
WIRELESS HID	Direct to any customer app (like keyboard)	2s auto switch off when disconnect or no data 10 min	5s. and connect BT on PC or Tablet	blinking 2 sec	push
WIRELESS HID+MAC					

WIRELESS DATA TRANSFER CONNECTION

SWITCH ON WIRELESS module push button 2 sec;

In **WIRELESS TO MDS** non-stop blinking on display up to connection to MDS app and selecting **STANDARD** or **ECO** sub-mode. *ECO recommended for battery economy*

In **STANDARD** submode data transfer 4 times/sec and all time on display.

Push button to save data to MDS app or use buttons and Timer inside app.

In **ECO (GATT)** submode caliper ready to transfer data any time with no indication. Push button to save data on MDS app.

For selecting next mode push 5 sec.

WIRELESS HID and **WIRELESS HID+MAC** blinking 2 sec on display and will be ready for searching on Tablet, Smartphone or Computer Bluetooth connections.

After succesfull connection save data to customers app with push button.

MICROTECH DataMet INSTRUMENTS have **WIRELESS HID** data output to transfer Data direct to any compatible operation systems and applications in keyboard mode.

WIRELESS HID CONNECTION



NO DONGLE



TRANSFER DATA TO
CAD, SPC OR OTHER
SOFTWARE



TRANSFER DATA TO
EXCEL OR OTHER
TABLE EDITORS



TRANSFER DATA TO
ANY BROWSWE OR
APP

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

CONNECTION

- 1) Switch on HID mode in WIRELESS menu
 - 2) Connect MICROTECH device to you PC or Tablet
 - 3) Select settings of Data transfer (Dot/Coma, Trail symbol -Tab, Arr Down, CL-LF)
- It gives possibility operate in different localizations, table editors
- 4) You can direct transfer data to any Windows or other OS application.



OPERATION

For transfer DATA throw WIRELESS HID you can use some variants:

- Button Push
- Touchscreen Push
- Timer function activation
- Send data from internal memory
- Data transfer in auto-Force mode (DataMet eForce calipers only)



CONNECTION STATUS INDICATION



WIRELESS DISCONNECTED



WIRELESS CONNECTED



WIRELESS HID CONNECTED

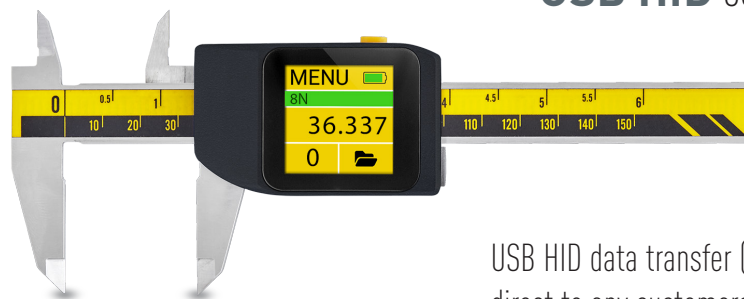


USB HID DISCONNECTED



USB HID CONNECTED

MICROTECH **DataMet** INSTRUMENTS have **USB HID** data output to transfer Data direct to any compatible operation systems and applications in keyboard mode.

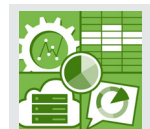


USB HID CONNECTION

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



TRANSFER DATA TO CAD, SPC OR OTHER SOFTWARE



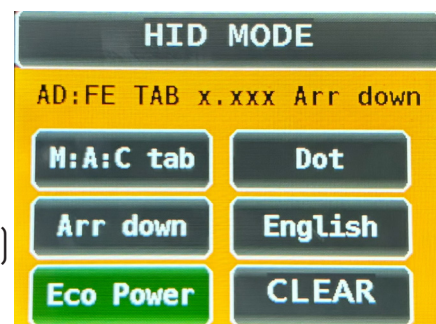
TRANSFER DATA TO EXCEL OR OTHER TABLE EDITORS



TRANSFER DATA TO ANY BROWSWE OR APP

CONNECTION

- 1) Connect micro USB cable from instrument to computer/tablet
USB Cable must be with data transfer wires
- 2) Activate USB connection mode on DataMet instrument
DON't activate USB connection without cable connection
- 3) Select settings of Data transfer (Dot/Coma, Trail symbol -Tab, Arr Down, CL-LF)
It gives possibility operate in different localizations, table editors
- 4) You can direct transfer data to any Windows or other OS application.



OPERATION

For transfer DATA throw USB cable you can use some variants:

- Button Push
- Touchscreen Push
- Timer function activation
- Send data from internal memory
- Data tansfer in auto-Force mode (DataMet eForce calipers only)



CONNECTION STATUS INDICATION



WIRELESS DISCONNECTED



WIRELESS CONNECTED



WIRELESS HID CONNECTED



USB HID DISCONNECTED



USB HID CONNECTED

MICROTECH CertiMet INSTRUMENTS have data output to transfer Data direct to any compatible operation systems and applications in keyboard mode.


For USB HID data transfer - necessary MICROTECH USB HID data cable (Item No 141083000)

Other types USB cables can broken CertiMet INSTRUMENTS


INPUT





USB HID CONNECTION





OUTPUT

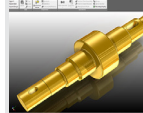

Windows



iOS



android


LINUX


macOS


TRANSFER DATA TO
CAD, SPC OR OTHER
SOFTWARE


TRANSFER DATA TO
EXCEL OR OTHER
TABLE EDITORS


TRANSFER DATA TO
ANY BROWSWE OR
APP

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

Item No	Type	Data button	Length, m	Devices
141083000	USB HID DATA CABLE DIRECT DATA TRANSFER, LIKE A KEYBOARD	+	2	CERTIMET Digital calipers IP54
				CERTIMET Digital indicators IP54

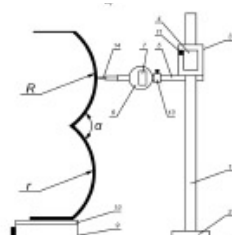
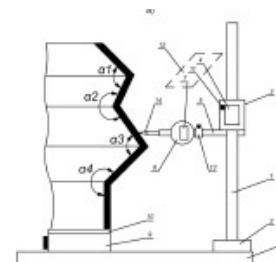
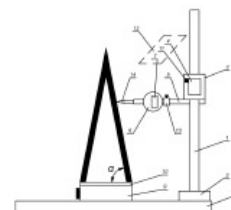
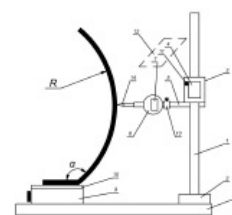
MEASURING HUB

- 2 DEVICE indication on main screen
- FORMULA
- SYNCRONIZATION
- 2D and ON-LINE SYNC GRAPH
- QUICK autoconnection
- 2 axis MEMORY MANAGER



2D MODE CONTACT PROBE MODE CONTACT

- 2 AXIS measuring
 - SYNC reading
 - 2D GRAPH
 - 2D DATA transfer
 - WIDE CONFIGURABLE
 - ANGLE MEASURING
- PROBE MODE-saving data by Probe Touch
 - AUTO-PROBE MODE - Touch value compensation
 - quick WIRELESS Probe connection



2D MODE LASER

- 2 AXIS measuring
- SYNC reading
- 2D GRAPH
- 2D DATA transfer
- WIDE CONFIGURABLE
- ANGLE MEASURING

2D MODE LASER-

- 2 AXIS measuring
- SYNC reading
- 2D GRAPH
- 2D DATA transfer
- WIDE CONFIGURABLE
- ANGLE MEASURING





HUB connection

- 1) MASTER device: select in WIRELESS menu **2D-M** - Master device on WIRELESS connection on HUB mode
- 2) SLAVE device: select in WIRELESS menu **2D-S** - Slave device on WIRELESS connection on HUB mode
- 3) HUB mode on MASTER device - select requested mode (PROBE, 2D) and Connect SLAVE device

PROBE MODE

A.C.on - Auto Connection active

A.C.off - Auto Connection no active

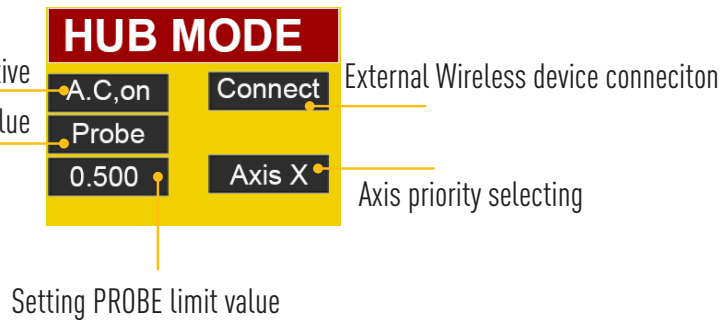
PROBE - Saving data when Probe will reach value

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

A.C.on - Auto Connection active

A.C.off - Auto Connection no active

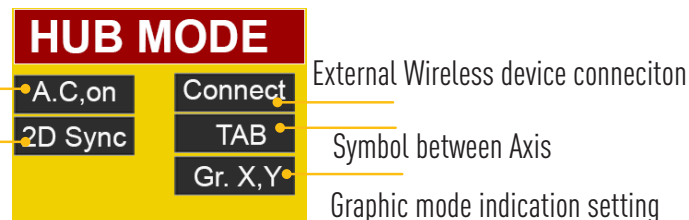
PROBE - Saving data when Probe will reach value

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

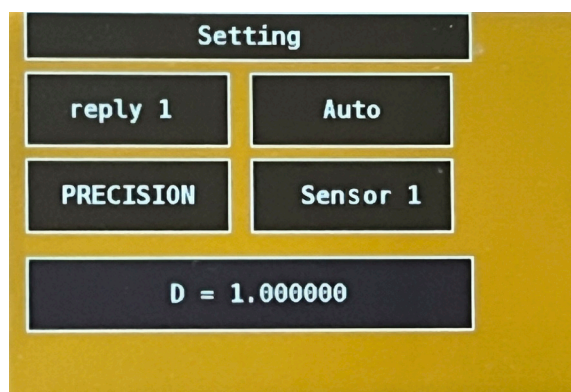
Disable - switch off modes



MOTORIZED VERSIONS OF HEIGHT GAUGES AND STANDS



MOTORIZED
WITH AUTO MODE



MICROTECH Modbus RTU connection box can be connected to MICROTECH computerized devices.

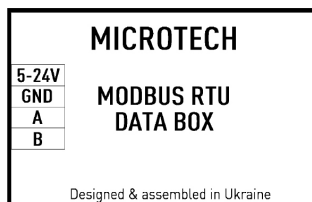
WORKING CONDITONS

Working temperature °C	5-40°
Humidity	70%
Water protection	IP40
Dimensions, mm	53x82x31
Weight, kg	0,15



GENERAL INFORMATION

- **Protocol:** Modbus RTU
- **Baud rate:** 9600 bps (configurable)
- **Data bits:** 8
- **Stop bits:** 1
- **Parity:** None



SUPPORTED FUNCTIONS

- **0x03 (Read Holding Registers):** data reading
- **0x06 (Write Single Register):** single register writing

FRAME DESCRIPTION

Address fields (8 bits)	Function code (8bits)	Data (any bits)	Error check (CRC) (16 bits)
-------------------------	-----------------------	-----------------	-----------------------------

CRC CALCULATION EXAMPLE IN C

```
uint16_t modbus_crc16(uint8_t *data, uint16_t length) {
    uint16_t crc = 0xFFFF;
    for (uint16_t i = 0; i < length; i++) {
        crc ^= data[i];
        for (uint8_t j = 0; j < 8; j++) {
            if (crc & 0x0001) {
                crc >>= 1;
                crc ^= 0xA001;
            } else {
                crc >>= 1;
            }
        }
    }
    return crc;
}
```

ACCESS TYPES

- **R/W:** Read and write
- **RO:** Read only
- **WO:** Write only
- **R/W*:** Variable can be read but always returns 0

REGISTER MAP

Register address	Description	Parameters	Default value	Access Type
0x2000	Device Address	1-254	20	R/W
0x2001	Data Exchange Rate	0 - 1200 bps, 1 - 2400 bps, 2 - 4800 bps, 3 - 9600 bps, 4 - 19200 bps, 5 - 38400 bps, 6 - 56000 bps, 7 - 57600 bps, 8 - 76800 bps, 9 - 115200 bps, 10 - 128000 bps, 11 - 187500 bps, 12 - 230400 bps, 13 - 256000 bps	4	R/W
0x2002	Measurement Units	0 - mm, 1 - inch	0	R/W
0x2003	Precision	mm: 0-x, 1-.x, 2-.xx, 3-.xxx, 4-.xxxx inch: 0-x, 1-.x, 2-.xx, 3-.xxx, 4-.xxxx, 5-.xxxxx	2	R/W
0x2004	Direction	0- direct, 1 - reverse	0	R/W
0x2005	Screen Brightness	10-100%	50	R/W
0x2006	Alarm	0 - no errors, 1 - communication lost	0	RO
0x2007	Device Type	1 - Indicator, 2 - Caliper, 3 - Micrometer, 5 - Bore Gauge, 9 - Protractors	-	RO
0x2008	Calibration Date	high 8 bits - day, low 8 bits - month	high 16 bit	RO
0x2009		16 bit - year	low 16 bit	RO
0x200A	Zero Setting	Writing 1 resets min and max values, then register set to 0	0	R/W*
0x200B	Reset Min	Writing 1 resets min value, then register set to 0	0	R/W*
0x200C	Reset Max	Writing 1 resets max value, then register set to 0	0	R/W*
0x200D	Device Position	Float position = int/10000	high 16 bit	RO
0x200E			low 16 bit	RO
0x200F	Device Position.	Float value coded according to IEEE754	high 16 bit	RO
0x2010	Float value according to IEEE754		low 16 bit	RO
0x2011	Min Position	Float value coded according to IEEE754	high 16 bit	RO
0x2012	Float value according to IEEE754		low 16 bit	RO
0x2013	Max Position	Float value coded according to IEEE754	high 16 bit	RO
0x2014	Float value according to IEEE754		low 16 bit	RO
0x2015	Max-Min Difference	Float value coded according to IEEE754	high 16 bit	RO
0x2016	Float value according to IEEE754		low 16 bit	RO
0x2017	Preset Value	Float value coded according to IEEE754	high 16 bit	R/W
0x2018	Float value according to IEEE754		low 16 bit	R/W

EXAMPLE OF REGISTER DATA

Device measuring value - 25.66 mm. The position is stored as a 32-bit integer (int32).

Formula for conversion to physical value: float position = (int32_value) / 10000.0f

Example: int32 = 0x0003EA58 = 256,856 (dec)

position = 256856 / 1000 = 25.6586

Register 0x200D = 0x0003 (high word)

Register 0x200E = 0xEA58 (low word)

Float format (IEEE754, 32-bit):

25.66(dec) = 0x41CD47AE

Split into 16-bit Modbus register:

Register 0x200F = 0x41CD (high word)

Register 0x2010 = 0x47AE (low word)

Request (read 4 registers starting from 0x200D):

01 03 20 0D 00 04 CRC

Device response:

01 03 08 00 03 EA 58 41 CD 47 AE CRC

Decoded data:

Register	Value	Description
0x200D	0x0003	High word, int32 position
0x200E	0xEA58	Low word, int32 position
0x200F	0x41CD	High word, IEEE754 float
0x2010	0x47AE	Low word, IEEE754 float

WIRELESS BUTTONS CONNECTION

CONNECTION WITH **DATA**Met INSTRUMENTS

SAVE DATA TO MEMORY
SET ZERO



299900012

CONNECTION WITH **MDS** APP FOR WINDOWS

SAVE DATA TO MDS WINDOWS
SET ZERO



2 CONNECTION MODES: **DATA**Met INSTRUMENTS AND MDS APP WINDOWS
2 BUTTONS: SET DATA TO MEMORY AND SET ZERO

CONNECTION WITH **DATA**Met INSTRUMENTS

SAVE DATA TO MEMORY
SET ZERO



299900013

CONNECTION WITH **MDS** APP FOR WINDOWS

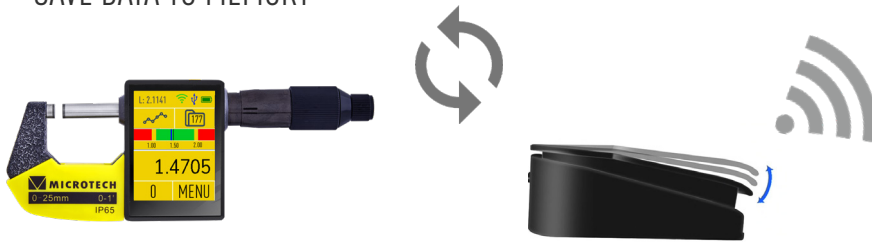
SAVE DATA TO MDS WINDOWS
SET ZERO



WIRELESS FOOTSWITCH CONNECTION

CONNECTION WITH **DATA**MET INSTRUMENTS

SAVE DATA TO MEMORY



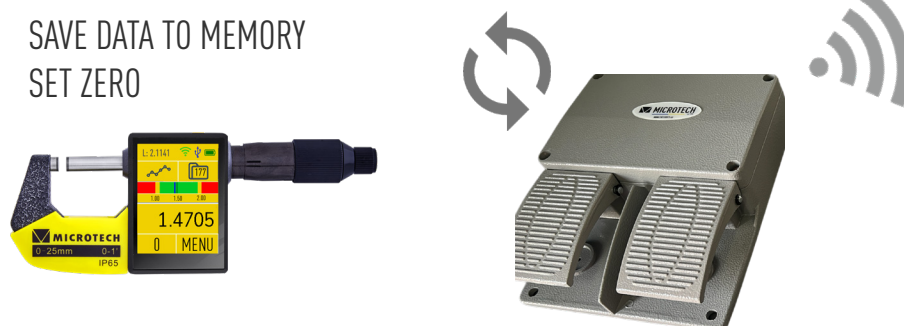
CONNECTION WITH **MDS** APP FOR WINDOWS

SAVE DATA TO MDS WINDOWS



CONNECTION WITH **DATA**MET INSTRUMENTS

SAVE DATA TO MEMORY
SET ZERO



CONNECTION WITH **MDS** APP FOR WINDOWS

SAVE DATA TO MDS WINDOWS
SET ZERO





MICROTECH

est. 1995

UKRAINIAN CREATIVITY - EUROPEAN RELIABILITY

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