

Flue ges meas., Light oil no. 2

8

23

66

325

F2

F1

ESC

F3

D

OK

AMPRO

它

02

**CO** 

NO

NO2

(ppm)

502 (99m)

Tgas



8 Bluetooth°

SAMSUNG

2.3

66

No

NO2

500



This app is available for both Android and iOS. Download the MRU4u app from the Play-store or APP-store.





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Analyzer Bluetooth settings	4
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#### Make sure your analyzer has the correct Bluetooth settings!



*Measurement menu* Press F3 (extras)

Bluetooth	
Bluetooth	BT-CL
Bluetooth transmiss. Protocol	Slave Type 1
Mode: Online	

**BT-CL for Android** Modify with arrow left/right

Device info 0.0 🛛 🗖 💻	כ
AMPRO2000	
Firmware version 1.68.6	1
Service history (F1)	B
Options list (F2)	þ
Bluetooth	þ
S Extras menu (Esc)	
print-out (Pr)	
Operating hours 55.	5
Adjustment date 08/01/2013	7
	- 1

service hist. options

Select Bluetooth and press OK

Extras menu 🔹
Settings
Date & time
Service menu
Default settings
Service values
Leak proof test
Contents SD card
Device info

measurestoragesettingExtras menuPress OK for settings

The following steps have been performed by us already, but have be repeated once you change any settings!

0.0

Settings	0 📼
LCD brightness (%)	60
Country US/	A/intern.
Language	English
Temperature unit	°F
Pressure unit	mmH20
LED condensate trap	50
Helping hints	ON
Core flow search	OFF
Switch-ON protection	OFF
and at any Direct and	

Settings screen Press F2 for Bluetooth

Extras menu	<u>-&gt;0.0</u> ← <b>□</b>
Settings	
Date & time	
Service menu	
Default settings	
Service values	
Leak proof test	
Contents SD card	
Device info	

measure storage settings Scroll down to device info Press OK

Bluetooth

\*\*\*Settings\*\*\*

PIN (F3)

initialize

Bluetooth

Bluetooth

Bluetooth

Bluetooth

Device info (Esc)

Select initialize

and press OK

OEM-Name PIN

OEM-Name (F2)

→0.0← 🖬 💷 )

Bluetooth	•
Bluetooth	BT-LE
Bluetooth transmiss. Protocol	Slave Type 1
Mode: Online	

**BT-LE for iOS** Modify with arrow left/right

Device info	.0 🛛 🗖 💻
AMPRO2000	
Firmware version	1.68.61
Meas kernel version	1.03
Hardware version	200
<b>Bootloader version</b>	1.10
Serial number	308081
Operating hours	55.5
Adjustment date 08,	/01/2017
service hist. options	
Dross the folder	hutton

Press the folder button



Restart the analyzer

You must restart the analyzer once you have modified any of these parameters!

on analyzer firmware)

OEM-Name PIN

Press the folder button

(this can look different depending

Bluetooth

\*\*\*Settings\*\*\*

Baudrt = 19.2 Mode = Slav

PinCod = 0000 Bonded = 0

Rem = 0006666FBC98

Authen=1

BTA = 0006666FBC5B

BTN ame = AMPRO SN 308081



#### ANDROID

Pairing your analyzer with your Smartphone - Activate Bluetooth in your phone You can't connect your phone to the analyzer if another phone is already paired with the analyzer! You have to disconnect any other devices that are paired with your phone (e.g. Bluetooth headset)!

Humble

🕸 🕅 🏟 🔋 📶 96% 🗎 8:22 AM

m



Activate Bluetooth on your phone



Pin will be requested for older units





Enter PIN 0000 or 1234



#### Pair with the MRU analyzer



Analyzer and phone are paired





Start the MRU4u on your phone

\$ <mark>8</mark> .	🔃 🏾 🔋 📶 48% 🛢 4:34 PM
	/IRU4u
	Measure
:=	Connect & Measure
	Storage
Ê	Protocols
Ŀ	Sites
	Extras
*	Service
\$	Settings
í	Device info



Press connect and measure

Press connect device





Select your device

Confirm with OK

#### If this screen stays empty, another phone might already be paired. Disconnect the other phone first!



#### <mark>iPHONE</mark>

Pairing your analyzer with your Smartphone - Activate Bluetooth in your phone You can't connect your phone to the analyzer if another phone is already paired with the analyzer! You have to disconnect any other devices that are paired with your phone (e.g. Bluetooth headset)!









Select Bluetooth



**Bluetooth activated** 



If your phone doesn't find any devices



Then open the MRU4u app (make sure you have the latest version!!)

•0000 T-	Mobile ♥ 6-42 PM 8 ■) MRU4u
	Measure
≣	Connect & Measure
	Storage
Ê	Protocols
₿	Sites
	Extras
*	Service
\$	Settings
<b>(</b> )	Device info



Select "Connect & Measure"

Select "Connect device"





**Select NEW device** 

Sometimes you will see more than one new device (if you have multiple new devices in iOS range). You can either turn off other devices in range or select "New device" until you have the right one.

MRU4u	
	Measure
≔	Measure (AMPRO SN314061)
Ê	Protocols
₿	Sites
*	Service
\$	Settings
<b>(</b> )	Device info

Once the correct device has been connected, the iOS will display the analyzer name and serial number



#### Taking a measurement / adding parameters



Screen while analyzer is zeroing

ኛ <mark>S 🖸 🧶 </mark>	🕸 🔃 🛱 🕈 📶 95% 🛢 8:51 AM
《 🖑 Measured val	ues
Search.	••
CO mg/m³	
CO /0%O2 ppm	
CO /x%O2 ppm	
CO corr. mg/MJ	
Draft inH20	
Eff. GCV %	
Eff. NCV	

Select the parameter you wish to add. Repeat this step for each additional parameter



Press to modify screen contents

S< 8 m 0	* 10 0	224	41% 🔳 🤅	5:02 PM
40 <sup>WRU</sup>	$\uparrow$	$\mathbf{V}$	+	
: <b>≡</b> Table	~	<b>'</b> Gra	aph	
Edit meas	sured valu	ies in	table	
Dewpoint °F				₽
NO ppm				ţ
NOx ppm				ţ
<b>T-Ambient air</b> °F				ţ
<b>T-Gas</b> °F				ţ
Add measure	d value			Ð
	Done			

Press "Done" to return to measurement screen



Select and then press Done Press + for additional parameters

약 <mark>S</mark> 🖬 🖬 🙃	* 🕅 🛱 🗟 📶 46% 🛢 4:38 PM
K Meu	AMPRO SN309468
Program	1 Natural gas
:≡ Table	📈 Graph
02 %	21.0
CO2 %	0.0
CO ppm	0
<b>Dewpoint</b> °F	32.0
NO ppm	0
	02 Pof: 2%
Stop	CO-Limit: 500ppm Interval: 2s

Press "Stop" to stop the measurement





Analyzers pump stops

### **Additional Information**

ŝ <mark>8</mark> 🖬	🖹 🏵 🔋 📶 48% 🛢 4:34 PM
	/IRU4u
	Measure
≔	Connect & Measure
	Storage
Ê	Protocols
8	Sites
	Extras
*	Service
\$	Settings
í	Device info

Main page



Screen turns grey Press save to save measurement to the phone

ŝ <mark>8</mark> 🖬 🖬 ô	* 🔃 🛱 🗟 📶 46% 🛢 4:39 PM
Protocols	
16.06.201	6
Program 1, Na 22:04:46	tural gas
Program 1, Wo 22:02:10	ood 30%M.

#### Protocols

Shows saved measurements Click on any saved measurement

S 🔮 🖬 🗗	≉ 🕅 현 🚡 📶 43% 🛢 5:48 PM		
Measurement saved successfully			
This measuremen	t:		
Add photo			
Select Site			
<u>A</u> Comment			
A Main menu	> ОК		

You can add a photo you can add comments Save the measurement to a site to view it



Protocols Saved measurement Displayed as "Table"



\$ S 🖬 (	9 🖯	*	N @ ? ./	97% 🗎 8:4	1 AM
					<
$\boldsymbol{\phi}$	Program 1 Natural gas 16.06.2016 22:04:46			gas	
:≡ т	able	📈 Gi	raph	i) Extr	as
20.96 20.94 8 20.92 20.92 20.90					
0.04 0.03 8 0.02 0.01 0.00 100					
Poison index, %					
0	03:00	22:03:30	22:04:00 Time	22:04	:30
Delete					

**Protocols** Saved measurement Displayed as "Graph"

\$ <mark>8</mark> • •	9 ô	* 10 0 7 .	🛯 97% 🖿 8:41 AM	
K AU			<	
Program 1 16.06.2016 22:04:4		am 1 .2016 22:04:46	Natural gas	
:≡ т	able	📈 Graph	(i) Extras	
<b>Mark</b> 13514	Break	ende water Path Loop		
	Photos			
Add photo				
	Device Info			
Devicetype: AMPRO2000 Serialnumber: 309468				
	Comment			
Delete				

#### **Protocols**

Saved measurement / EXTRAS



Use this button to send the measurements per email



### S 🕸 🕅 🏟 🕄 📶 97% 🗎 8:42 AM MRU 4U PROTOCOLS 3 Site-Nr. Name Street+Nr. ZIP Location Comment Save Delete From address book



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MRU4u

Protocols

Sites

Service

Settings

(i) Device info

E Connect & Measure



New site, enter information

Sites Enter information then "Save"

From address book

Delete

Comment

Hurst Boiler 1523

Save

Select a site to view it

Press "New site" to add one



#### Settings Insert email address Change log intervals Modify measuring units



Service Find a MRU service location



Change log intervals



### Settings

Modify measuring units



Device info Shows details about the connected analyzer

