

# How to detect M-Bus meters by AT command

FAQ describes how to set 2N® SmartCOM PRO for [AMS function](#) by AT command. 2N® SmartCOM PRO automatically detect M-Bus meters. Then reads data from M-Bus meters and store data in internal memory. 2N® SmartCom server with web interface readout 2N® SmartCOM PRO units and parse M-Bus messages to CSV files.

Tested with firmware (SCE\_1-12-0-12-24). Ask 2N for this firmware or access to test [web server](#) - contact your salesman or send a request go to <https://support.2n.cz>

Connect 2N® SmartCom PRO unit to your 2N® SmartCom server. In this scenario will be used [2N® SmartCom test server with web interface](#).

Check, that your unit is connected to the server. (Web interface or in software 2N® Control panel)

## Remote reading terminals monitoring



Id	S/N	Name	MSISDN	Active	Online	Groups
34	50-0663-0027	Test_Tomas		ON	ON	

## Enable AMS function (0 = AMS turned off)

```
at^scams="enable",1
```

## Meter detection:

Performing this command deletes all the data from 2N®SmartCom PRO terminal memory as well as the meter reading configuration part. The parameter interval is global for all installed meters by AT command.

## AT command:

```
at^scamsadd=<port>,<protocol>,<baudrate>,<interval>,<number_of_expected_devices>
```

## Examples:

(detection 2 meters on M-Bus, for speed 2400 Bd and interval 1 minute)

```
at^scamsadd=2,2,"default","1m",2
```

```
at^scamsadd=2,2,2400,"1m",2
```

```
at^scamsadd=2,"mbus","default","1m",2
```

```
at^scamsadd=2,"mbus",2400,"1m",2
```

possible interval for data reading from meters - values: 1M, 2M, 3M, 4M, 5M, 6M, 10M, 12M, 15M, 20M, 30M, 1H, 2H, 3H, 4H, 6H, 8H, 12H, 1D

Answer:

^SCAMSADD:  
<error\_code>,<number\_of\_devices>,"<primary\_address\_1>,<secondary\_address\_1>;<primary\_address\_2>,<secondary\_address\_2>;....."  
OK

Examples:

without error - 2 meters found

^SCAMSADD: 0,2,"0,08031768;1,15020416"

error - different number of meters found (only 1)

^SCAMSADD: 65286,1,"0,08031768"

error(collision of secondary addresses)

^SCAMSADD: 131094,0,""

Go to web interface to section "Terminals Monitoring" and synchronize your 2N® SmartCom PRO unit with 2N® SmartCom server.

### Remote reading terminals monitoring

Id	S/N	Name	MSISDN	Active	Online ^	Groups
34	50-0663-0027	Test_Tomas		ON	ON	

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Press Start sync

### Meter Sync

Synchronize Meters on Terminal Id = 34?  
action id: 0  
result:

**Start sync** Cancel

Wait until synchronization is finished

## Meter Sync

Synchronize Meters on Terminal Id = 34?  
action id: 20246  
result: Finished

[Start sync](#) [Cancel](#)

In section "Meters" you can find information about your M-Bus meters

Devices ▾ Results ▾ Administration ▾ Logged user: Admin Admin [Change password](#) | [Logout](#)

- Terminals
- Meters**
- Wireless Meters

### Remote reading terminals monitoring

027

Id	S/N	Name	MSISDN	Active	Online ^	Groups
34	50-0663-0027	Test_Tomas		ON	ON	<input type="button" value="⊕"/> <input type="button" value="⊖"/> <input type="button" value="↺"/> <input type="button" value="↻"/> <input type="button" value="✎"/> <input type="button" value="✖"/>

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Results are in section - "Results" - For the access data (login, password) please contact your salesman or send a request go to <https://support.2n.cz>

Devices ▾ **Results** ▾ Administration ▾ Logged user: Admin Admin [Change password](#) | [Logout](#)

- FTP-Results
- WM-Bus decode

### Remote reading terminals monitoring

027

Id	S/N	Name	MSISDN	Active	Online ^	Groups
34	50-0663-0027	Test_Tomas		ON	ON	<input type="button" value="⊕"/> <input type="button" value="⊖"/> <input type="button" value="↺"/> <input type="button" value="↻"/> <input type="button" value="✎"/> <input type="button" value="✖"/>

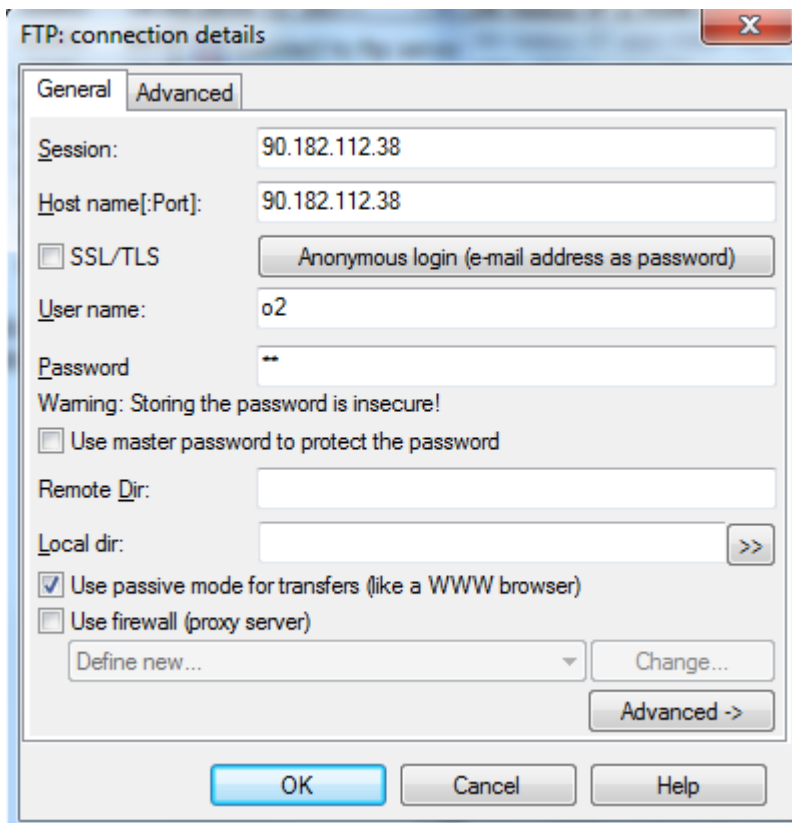
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Index pro ftp://90.182.112.38/2016\_06/

 O adresář výše

Název	Velikost	Změněno
 15020416_50-0663-0027_valuereport_20160606162614_3104.csv	1 KB	6.6.2016 16:26:00
 50-0663-0027.txt	2 KB	6.6.2016 15:00:00
 50-1066-0056.txt	1 KB	6.6.2016 16:01:00
 8031768_50-0663-0027_valuereport_20160606150003_3104.csv	2 KB	6.6.2016 15:00:00
 8031768_50-0663-0027_valuereport_20160606162614_3104.csv	1 KB	6.6.2016 16:26:00

or can be download by FTP client - login name: ask 2N



Name	Ext	Size	Date	Attr
[.]				<DIR>
50-0663-0027	txt	1.7 k	06.06.2016 15:00	-644
50-1066-0056	txt	164 b	06.06.2016 16:01	-644
 8031768_50-0663-0027_valuereport_20160606150003_3104	csv	1.4 k	06.06.2016 15:00	-644
 8031768_50-0663-0027_valuereport_20160606162614_3104	csv	725 b	06.06.2016 16:26	-644
 15020416_50-0663-0027_valuereport_20160606162614_3104	csv	484 b	06.06.2016 16:26	-644

General AMS errors	
0	- without error
1	- error of input data
2	- error of output data
3	- protocol cannot be used for this port
4	- readout not started

M-Bus AMS errors	
131072	- non specific error (internal error of module)
131073	- readout was stopped by user
131074	- bad format address and speed of the device
131075	- parameters of the port were not set
131076	- message "SND_NKE" was not send in defined time interval to the device
131077	- message "SND_NKE" was not send in defined time interval to the device
131078	- timeout - receiving "SND_NKE" message response
131079	- bad frame when receiving "SND_NKE" message from the device
131080	- message "REQ_UD2" was not send
131081	- message "REQ_UD2" was not send
131082	- timeout - receiving "REQ_UD2" message response
131083	- incorrect communication frame for "REQ_UD2" message
131084	- incorrect response for "REQ_UD2" message
131085	- incorrect device address in response for "REQ_UD2" message
131086	- message "SND_UD slave selection" was not send in defined time interval
131087	- message "SND_UD slave selection" was not send in defined time interval
131088	- timeout - receiving "SND_UD slave selection" message response
131089	- bad frame for "SND_UD slave selection" response message
131090	- message "SND_UD slave selection" was not send in defined time interval during searching slaves on bus
131091	- message "SND_UD slave selection" was not send in defined time interval during searching slaves on bus
131092	- message "REQ_UD2" was not send in defined time interval during searching slaves on bus
131093	- message "REQ_UD2" was not send in defined time interval during searching slaves on bus
131094	- collision of secondary addresses during searching slaves on bus (two or more devices have same secondary address)
131329	- bad first "start" byte for device´s response message
131330	- bad second "start" byte for device´s response message
131331	- bad first "stop" byte for device´s response message
131332	- bad checksum of the response frame
131333	- bad value of the response frame length
131334	- bad value of the response frame length