

GSM manual and Software User Guide



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1. SOFTWARE USER GUIDE

1. Install the GSM Euromag Software GSM_X.X.XXXX.XXXX: follow program instructions during installation.

28239 in the following folder. To r folder. Click Install to start the
Browse

2. Run the program : Start -> MCE-Link Euromag -> GSM or click on the icon created on your desktop



3. COM Setup :

- COM number, select the correct COM port of PC connected to MC608 (USB RS485 cable converter or IrCom cable, refer to MC608 manual TD210-1 par. 9.2)
- For RS485 cable select the correct Baud Rate and Slave ID (factory default: BR=9600
 - , ID=1), for IrCom cable select " IrCom" button.

nect Parameters AutoReport	APN About	
	NG Pic	SignalLevel : Operator :
COM Slave ID COM3 1 Baud Rate 1 KCOM 9600 455	SENSOR ID	
Connect	Read Config	Write Config
Read Log File	Open Profile	Save Profile
TEST-MODEM Send E	mail/SMS	
Send SMS	Send Email	Send Email Log
Contact N*1	Sond Test Email/SM	S to:
	Number: +393460016 Email: flowdata@e	805 Gromag.com

med Parameters AutoReport	APN About	
	NG.	SignalLevel : Operator :
OM Settat	RowMeter	
OM Slave ID OM3 • 1 •	SENSOR ID BA	C2440
9600 + (8 485	GSM INFO	
Disconnect	Read Config	Write Config
Read Log File	Open Profile	Save Profile
EST-MODEM Send E	mail/SMS	
Send SMS	Send Email	Send Email Log
Contact N* 1 +	Send Test Email/SM	S to:
	Number: +393460016 Email: flowdata@e	805 uromag.com

4. Click CONNECT and wait for connection , wait modem start up.

ON State State Operator: vodatone I OM State Rewleter SENSOR ID BAC2440 Baud Rate KCOM GPRS/UMTS B.V: 1.0 P.V. 1.3b2_19_09_2014 Disconnect Read Config Write Config Save Profile EST- MODEM Send Email/SMS Send Email Send SMS Send Test Email/SMS to:	Europa	APN About	
OM Seture RewMeter COM3 1 Stave 1 Stave 1 Stave COM Stave COM Stave COM Stave COM Stave Contig Write Contig Save Profile EST-MODEM Send Email/SMS Send Email Send SMS Send Test Email/SMS to:	INTERNATION	MG ML	Operator ; vodafone IT
COM Staven ID COM3 1 1 ENSOR ID BAC2440 Baud Rahe KCOM GPRS/UMTS B.V. 1.0 P.V. 1.3b2_19_09_2014 Disconnect Read Config Write Config Read Log File Open Profile Save Profile EST- MODEM Send Email/SMS Send Email Log Send SMS Send Test Email/SMS to:	OM Setup	FlowMeter	
Bind Ride • CON 9500 • etcon Disconnect Read Config Write Config Open Profile Save Profile Save Profile EST- MODEM Send Email/SMS Send Email Send SMS Send Email Contact N* 1 • Send Test Email/SMS to:	COM Silawa ID COM3 ~ 1 ~	SENSOR ID BA	C2440
Second • Implaints Implaints GPRESUMITS B.V. 1.0 P.V. 1.362_19_09_2014 Disconnect Read Config Write Config Read Log File Open Profile Save Profile EST- MODEM Send Email/SMS Send Email Send Email Send SMS Send Email Log Contact N* 1 • Send Test Email/SMS to:	Based Rate 📄 KCOM		
Disconnect Read Config Write Config Read Log File Open Profile Save Profile EST- MODEM Send Email/SMS Send Email Log Send SMS Send Email Log Contact N* 1 Send Test Email/SMS to: Send SMS	9600 + 1 10 435	GPRS/UMTS B.V: 1.0	P.V: 1.362_19_09_2014
Disconnect Read Contig Write Contig Read Log File Open Profile Save Profile EST- MODEM Send Email/SMS Send Email Send SMS Send Email Contact N* 1 *		[autout]	wa o r
Read Log File Open Profile Save Profile EST-MODEM Send Email/SMS Send Email Send Email Send SMS Send Email Log Contact N* 1 * Send Test Email/SMS to:	Disconnect	Read Config	write Conlig
EST- MODEM Send Email/SMS Send SMS Send Email Log Contact N* 1 + Send Test Email/SMS to:	Read Log File	Open Profile	Save Profile
Send SMS Send Email Send Email Contact N* 1 + Send Test Email/SMS to:	EST-MODEM Send E	mail/SMS	
Contact N* 1 + Send Test Email/SMS to:	Send SMS	Send Email	Send Email Log
The second s	Contact N* 1 +	Send Test Email/SM	S to:
Number: •393460016805 Email: flowdata@euromag.com		Number: •393460016 Email: flowdata@e	805 euromag.com

GSM Signal Level

	Signal level	Power reception		
	0	-113 dBm	No reception	1
	1	-111 dBm]
	2	-109 dBm		1
	3	-107 dBm		1
	X	113 + (2*x) dBm		1
	30	-53 dBm		
$\mathbf{>}$	31	-51 dBm	Maximum reception	
	99	not known or not detectable		

We recommend a Level of minimum 18 for a good communication. Under 18, the communication will work but with some errors, so some packets will be repeated and the overall throughput will decrease.

- 5. Parameters Configuration
- · Contacts mobile number and email
- · Sender email address configuration

GSM Setup V_1.0.5437.15518		
Connect Parameter AdoReport APN EUROMAG INTERNATIONAL Contacts	About	
Mobile Number	Email Adress	
1. +39039090400	nowdata@euromag.com	
2.		
3.		
4.		
5.] [
Sender		
Sender Email Adress	flowdata@euromag.com	
C Advance		Default Settings
Status: OK MC TIME: Thursday 08:53 20	/11/2014 (UTC+1)	.6

- Note 1: before sending an email, a Sender e-mail address must be provided first. Use any e-mail address or leave Default address: flowdata@euromag.com
- Note 2: Euromag provides a pre-set sender configuration (SMTP, username and password) that can be modified at customer choice. Click "advance" check box to show advance settings (a message will appear). Incorrect settings can cause a failure on e-mail sending.



- Note 3: when using custom settings, SSL connection not supported.
- Note 4: when using custom settings, e-mail with attachment will be sent only to the first contact.
- Note 5: in case of e-mail sending failure, service provider may be blocking the e-mail.
 Please check with your mobile provider or use a different one.
- Note 6: csv file on e-mail attachment only available with Default Settings. When using custom settings, attachment will be only .bin format (no .csv).
- 6. Auto Report Interval
- SMS send interval
- · Email send interval
- · Email with log send interval (E-mail + attachment)
- · Web data send interval



Send Frequency Options:

- None: Send disabled
- Hourly Interval: Send every x hours starting from mid-night 00:00
- Daily at Hour: Send every day at hour x
- Day of Week: Send every week ad day y at hour x
- Day of Month: Send every month day y at hour x

Example: set SMS send Interval:

	HE HISCH WAS
Connect Parameters AutoRecot APN About SMS Enail Enneil Log WEB SET SMS SEND INTERVAL Send Frequency INTERVAL None Select the INTERVAL hours Hourly Interval Daily at Hour Day of Week Day of Month 1 2 SMS send disable EMAIL send disable EMAIL Log send disable Web data send disable	SAVE CHANGES

To save changes click on Save changes Button.

GSM Setup V_1.0.5437.1551	8	
Connect Parameters Auto Reo SMS Email Email Log W SET SMS SEND IN Send Frequency None Hourly Interval Daily at Hour Day of Week	ot APN About EB TERVAL INTERVAL Select the INTERVAL hours Hours 4 +	SAVE CHANGES
Day of Month SMS send every: Number of sms ser 00:00; 04:00; 08:0 EMAIL send disable	4 hours, starting from midnight, 00:00 it per day 6 @: 0; 12:00; 16:00; 20:00; e	D ;
EMAIL Log send d	sable.	
Status: OK MC TIME: Thursday	08:53 20/11/2014 (UTC+1)	

GSM Setup V_1.0.5437.15518 Connect Parameters AutoReport APN About SMS Email Email Log WEB SET WEB DATA SEND INTERVAL Send Frequency INTERVAL SAVE Select the day of week and hour None CHANGES Hourly Interval Day of Week @ Hour Daily at Hour Monday +3 12:00 . Day of Week Day of Month SMS send every: 4 hours, starting from midnight, 00:00 . Number of sms sent per day 6 @. 00.00; 04.00; 08.00; 12.00; 16.00; 20.00; EMAIL send disable. EMAIL Log send disable. Web data send disable. Status: OK MC TIME: Thursday 08:53 20/11/2014 (UTC+1)

Repeat the procedure to set other send options

7. APN configuration

- · set up access point network provided by your operator for data connectivity
- - set up the PIN number of the SIM card if needed
- enable data Roaming. NOTE -> If selected, an extra charge may be applied by the phone operator

GSM Setup V_1	0.5437.15518	house -3
Connect Parameter	AdoRepot APN About EUROMAG	
DATA	mobile.vodafone.it	_
User Name		
Password		
SIM PIN		
Enable Dat	a Roaming	
tatus: OK MC TR	ME: Thursday 08:53 20/11/2014 (UTC+1)	

8. Write Configuration

• Write current configuration to modem

EUROM	A APN (About)	SignalLevel : 14
	WIAL	Operator : vodafone I
DM Sellar	RowMeter	
COM Slave ID COM3 v 1 v	SENSOR ID BAG	22440
Baud Rate C YCOM	GSM INFO	
Write Canfig	n Configuration Write OK	Write Config
Write Config D Moder Re	n Configuration Write OK	Write Config Save Profile
Write Config D Moder Re EST Send SMS	Configuration Write OK	Write Config Save Profile Send Email Log
Write Config D Moder Re EST Send SMS Contact N* 1 T	Configuration Write OK	Write Config Save Profile Send Email Log

- 9. Save current profile to file
- Save current configuration to a file on PC. This can be used to program other modems with same configurations
- 10. Open profile from file
- · Open a configuration from a file on PC

- 11. Test Functionality
- Test Network , Operator & Signal Level
- Test SMS sending
- Test Email Sending
- Test Email with data log sending

	NG 01.	Operator : vodalo
COM Setup DOM Slaver ID COM3 • 1 • Band Rate 9600 • @ 415	RowNeter SENSOR ID BA GSM INFO	C2440
Disconnect	Read Config	Write Config
Read Log File	Open Profile	Save Profile
TEST-MODEM Send E	mail/SMS	
Send SMS	Send Email	Send Email Log
Contact N*	Send Test Email/SM	S to:

Test SMS

NOTE: an **R** will appear, when modem is on Roaming

()	Send Test SMS to number: +393339999998
-	Example Message:
	BAC56660
	02:22 08/05/14 20C
	100m3/h
	v:1.51m/s
	95682.36m3
	-621.25m3
	2.3bar
	26.3C
	s20 b85%

In case of failed transmission the programmed schedule will not change, next try will be following the programmed time interval; the first good transmission will contain also the data lines that have not been sent.

NOTE

IF THE TRANSMISSION CONTINUES TO FAIL THE SEND INTERVAL IS REDUCED AUTOMATICALLY TO SAVE BATTERY LIFE, FIRST IS LIMITED ONCE A DAY (5 FAILURES), THEN ONCE A WEEK (9 FAILURES). AS SOON AS ONE ATTEMPT SUCCEED, THE REGULAR SCHEDULE IS RESTORED.

If the communication is not available for a long time the data keeps accumulating; if the size of accumulated data become too large, the transmission is divided in partial sending every hour to allow communication being faster and less difficult for the network.

- 12. SMS and E-mail test functionality from the Converter
- MENU -> OTHERS -> COMMUNICATIONS -> CELLULAR DATA
- Test SMS
- Test Email

sensor ID time/date converter internal temperature flowrate corresponding flow velocity positive totalizer negative totalizer line pressure* line temperature* network signal strength / battery residual energy alarms** (if anv)	TST1003 10:02 21/02/2014 21C 202.346 m3/h v:7.16 m/s 96647.38 m3 -360.768 m3 2.6 bar 14.7 C s18 b72% LFH

*only available with the line pressure / temperature option installed

**ALARMS LIST

CE > coil excitation failure EP > empty pipe detected FH > high flowrate (over the selected threshold) FL > low flowrate (below the selected threshold) PO>pulses overlap RE>flowrate read error LV>insufficient voltage detected HT>high converter temperature LT>low converter temperature

13. Read Email Log data (only needed when using custom sender configuration on e-mail settings. When using Default settings, csv file available).

- 1. save the received email attachment file data.bin on PC
- 2. click on Read Log File Button and select the data.bin file to be converted
- 3. open the log file with any text editor (i.e. Excel).



2. SIM INSERT / REPLACEMENT PROCEDURE

1. Remove the front cap of the converter





2. Carefully remove the front board support .





3. Carefully insert the sim following the instruction below...







3. GSM MESSAGES

MESSAGE	HEADING
Pin number not entered do you want to continue ?	"No pin number"
End file key missing	"Read datalog"
Read ok	
Damaged or invalid data file	"Read datalog"
Parameters not valid	"Error save parameters"
This is a different config file	
Modem configuration missing	па
Please remove sim from modem and use puk to unlock	"Sim locked"
Modem's setup data contrasting mc's data	
Modem setup missing or data not valid!	"Modem setup error"
Sms sent ok	"Sms"
Sms sent error	"Sms"
Email sent ok	"Email"
Email sent error	"Email"
Modem date and time are different from pc date and time	Data time synchronization
Mc week day is different from pc week day	Data time synchronization
Error time synchronization.	"Data time synchronization "

TYPE OF MESSAGE	DESCRIPTION
Warning	
Warning	Datalog file corrupted or not complete. This happens when communication is interrupted or line goes off
Warning	File datalog corrupted
Error	
Information	This message appears when a different modem's configuration is loaded
Warning	
Warning	
Warning	Modem not configured, or configured to a sensor different than the coupled one of the converter
Error	Modem not configured, or configured to a sensor different than the coupled one of the converter
Information	
Error	
Information	
Error	
	Synchornise MC time with PC time
Error	

MESSAGE	HEADING
Data roaming enabled \r\nan extra charge may be applied by the phone operator	"Data roaming enabled"
Please reset modem	"Communication error "
Error com	"Com error"
Modem configuration error	"Modem config"

TYPE OF MESSAGE	DESCRIPTION
Warning	
Warning	
Error	Select the correct COM port for communication
Error	



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