



Electronic flowmeter

Tel.: 03303 / 504066

Fax: 03303 / 504068

Version V3.0.4

MOP_MES_01343_EN_D - 07/12/2016



DESIGNATION	DESCRIPTION
Product Type	Electronic Flowmeter
Product	Electronic Flowmeter 2015 Version V3.0.4 DN 40 DN65 DN80 DN 100 DN150
Product Reference (concerned in this manual)	Ref. 32972, 32973, 32974, 32975, 33791 Ref. 32974 used for all visuals
Documentation Ref.	MOP_MES_01343_EN
Language	English
Creation Date	01/07/2015
Modification Date	07/12/2016
Revision tracking	Rev. A - 01/07/2015: - Original File Rev. B - 05/01/2016: - Use changes Rev. C - 06/04/2016: - Characteristics changes Rev. D - 07/12/2016: - Change "charging the battery" process and new "ON/OFF" function for wired connection

Tel.: 03303 / 504066

Fax: 03303 / 504068

4 NATE	
1 ◆ NOTE	4
2 • GENERAL WARNING	4
3 • SECURITY	
3.1 - GENERAL INSTRUCTIONS	4
3.2 - USE	
3.3 - LIMITS OF USE	5
3.4 - SPARE PARTS	
3.5 - SAFETY ELEMENTS	
4 ◆ RESPONSABILITY	
5 • WARRANTY	
6 • HANDLING / TRANSPORT / STORAGE	
6.1 - GENERAL INFORMATION	
6.2 - DELIVERY INFORMATION	6
6.3 - SHIPMENT OF EQUIPMENT	
6.4 - STORAGE OF EQUIPMENT	
7 ◆ THE ELECTRONIC FLOWMETER: THE IDEAL CHOICE OF THE MARKET	
8 • STRENGTHS	
9 • OPTIONS AND TYPES	
10 ● MEASURING PRINCIPLE	
10.1 - FLOW MEASUREMENT	
10.2 - PRESSURE MEASUREMENT	8
11 • TECHNICAL SPECIFICATIONS	
11.1 - MEASUREMENT SYSTEM	
11.2 - CHARACTERISTICS	
11.3 - MEASURING ACCURACY	
11.4 - CONDITIONS OF USE	
11.5 - CONNECTION OUTLETS	
12 • DIMENSIONS	
12.1 - FLOWMETER	
12.2 - STABILIZING LEGS MADE IN ALUMINIUM ALLOY	14
12.3 - STABILIZING LEGS MADE IN PLASTIC	14
13 • PREFACE	
14 • FOLD/UNFOLD	
15 • FUNCTIONS OF THE FLOWMETER	16
15.1 - POWERING ON	
15.2 - POWERING OFF	
15.3 - TO START USE	1/
15.4 - CHANGING THE DISPLAY	
15.5 - RESETTING THE SAMPLE NUMBER TO ZERO	19
15.6 - RESETTING THE VOLUME TO ZERO	19
15.7 - BATTERY SAVER	19
15.8 - BLUETOOTH® OR SERIAL CONNECTION ACTIVATION	20
15.9 - LOW BATTERY	
15.10 - CHARGING THE BATTERY	
15.11 - USING THE CHARGER AS A EXTERNAL POWER SUPPLY	
15.12 - BLUETOOTH® INDICATOR	
15.13 - CONNECTING TO A HOST	
15.14 - APPLICATIONS FOR A SMART PHONE	
16 ● USE OF SOFTWARE TERMITE	
16.1 - INSTALLATION OF TERMITE	23
16.2 - WIRED CONNECTION	
16.3 - SETUP SOFTWARE TERMITE	
17 • SPECIFICATIONS FOR INSTALLATION	
18 • CARE AND MAINTENANCE OF THE DEVICE	
18.1 - SAFETY INSTRUCTIONS	
18.2 - GENERAL PREVENTIVE MAINTENANCE	29

Tel.: 03303 / 504066



1 • Note

POK SAS reserves the right to change or modify the specifications of its products at any time to incorporate the latest technological and regulatory developments. The information contained in this document is thus subject to change without notice.

2 • General warning



Please read the information contained in this operating manual before using the equipment. The use, maintenance, or any other operation of the equipment, must be carried out exclusively by personnel informed of safety rules and trained in the use of this material.

The non-compliance of safety instructions can be dangerous and cause serious bodily harm and/or property damage. POK SAS cannot be held liable for any incidents that occur during the use if the instructions and safety (specific to the area of operation and equipment) are not respected and/or followed.

3 ● Security



This symbol indicates important safety tips. Pay careful attention to prevent serious bodily harm and/or property damage.



This symbol indicates instructions that must be observed to ensure smooth operation of the device. Please always make sure to follow all the necessary precautions.



This symbol indicates useful information to know and understand the correct operation of the device.

3.1 - General instructions

The device should be handled by trained professionals who have read the operating instructions, given in this manual, prior to use. The device should never be handled by people suffering from lack of sight, hearing, and illness or under the influence of alcohol or drugs, legal prescriptions or over-the-counter drugs.

Below you will find information to work safely, which must be followed when using the device.

- The device must be used in accordance with the conditions written and provided by POK in the present user manual.
- Always check, before each use, the general condition of the device is in working condition.
- Make sure the battery power is fully charged.
- Any use not adhering to the requirements of the technical instructions could lead to risks of damage to persons, property or the environment.
- Any contact with live parts (under voltage) may cause death.
- In case of damage likely to affect the housing (IP protection) of the device must be stopped.
- Transformations and changes to the device are strictly prohibited.
- Avoid electrostatic charging on plastic units and cables.
- Do not clean the unit with a damp cloth. In principle, a friction with non-conductive materials should be avoided.

Tel.: 03303 / 504066





- Property damage and/or bodily harm are important to remember in these cases:
 - Unauthorized removal of protective elements
 - Improper use or hazardous material situations
 - Insufficient maintenance
 - Never put anything, in particular metal, inside the meter.
 - Avoid using the meter near appliances generating strong magnetic fields
 - Avoid dust deposits on the meter
 - Adhere to the safety rules that apply to your facility / environment before using the device. It emits permanently when it is connected to a remote device.

3.2 - Use

The correct use of the device is mandatory and POK assumes compliance with the conditions of service and maintenance of the equipment.

Please respect the technical limits of the equipment.

The product should not be used if a component is damaged or missing.



The recommended pressure of use is 7 BAR. The efficiency of the equipment outside of this range is not guaranteed. The non-compliance of safety instructions and a use of the equipment beyond the recommended pressures can be dangerous and cause serious bodily harm or even death.

3.3 - Limits of use



POK guarantees the equipment to operate at the maximum working pressure of PN16. Except explicit agreement in writing, our warranty does not cover the uses exceeding this pressure.

3.4 - Spare parts

For spare parts, only use parts and accessories from POK directly.

3.5 - Safety elements

It is prohibited to make the safety elements inoperative, to modify or use in a manner contrary to their purpose.

4 • Responsability

POK is not responsible for any damage caused by its equipment (and all accessories) resulting from improper use or by unqualified or untrained staff. Any claims from third parties are also excluded.

Whether the problem is mechanical, electrical, or the software, POK will not be held responsible for the consequences of any changes made (in particular - changes in characteristics or changes made by the user) without the written agreement of POK.

Tel.: 03303 / 504066

Fax: 03303 / 504068

MOP



5 • Warranty

- Without prejudice to the legal guarantee which applies in any case, POK offers a one year guarantee (from the date of shipment to customer) on the whole package of equipment (the device, battery charger and accessories) with the exception of worn parts, against all defects in design, construction, manufacturing and against any abnormal wear, provided, however, to have used the hardware in accordance with the present technical instructions.
- If damage occurs while attempting to troubleshoot, modify or change parts and has not been authorized by POK without it's prior written consent, the guarantee will not be upheld.
- The POK guarantee excludes all damage caused by following:
 - Misuse or non-compliance in accordance with standard practice
 - A wiring error
 - Negligence
 - Lack of maintenance
 - Mishandling
 - Improper storage
 - Use in polluted areas (chemical, electrochemical, aggressive vapors, etc.)
- Maintenance and repair of POK products can only be completed by a specialized qualified and trained professional according to POK.
- POK cannot in any case bare the consequences of direct or indirect loss suffered by the customer in case of failure of its equipment. The responsibility for POK is strictly limited to its supplies and will in no case give rise to compensation for damages.
- Repair or modification of the device during the warranty period cannot have the effect of extending that period.
- Packaging costs, packing supplies, shipping/transportation and insurance of the device to POK during a return service, during the warranty period, remains the customers responsibility.
- POK warranty includes repair (parts and labor) or replacement of defective parts after technical expertise. The place where the warranty verification is certified is at the POK factory currently located in Nogent-sur-Seine, France.
- In case of any disputes or disputes relating to a provision or to its rules, the Tribunal of Commerce in TROYES has exclusive jurisdiction, even in cases of appeal or pluralities of the defendants.

6 • Handling / transport / storage

6.1 - General information

When unpacking the equipment after transport, check that there is no mechanical damage and/or loose parts in the interior of the package. In case of damage, the carrier must be informed immediately. In this case, do not put the equipment into use.

6.2 - Delivery information

POK equipment is delivered in a double-walled cardboard box. The package is securely closed with adhesive tape. A delivery note is included with the equipment.

6.3 - Shipment of equipment

In case of reshipping the equipment or transferring the shipment to other sites, the shipping process above shall be followed.

6.4 - Storage of equipment

When storing the device, it is recommended to keep it in its original packaging to protect from humidity, dust and kept at normal room temperature.

Tel.: 03303 / 504066

Fax: 03303 / 504068

7 • The electronic flowmeter: the ideal choice of the market

The electronic flowmeter POK V3.0.4 is the ideal choice for measuring the flow and pressure of water in multiple applications.

Existing in various diameters (from DN40 to DN150) this flowmeter can measure flow rates from 20 Lpm to 10,000 Lpm and pressures up to 16 BAR.

Featuring advanced electronic technology; the meter has specific functions such as:

- Battery Saver: display can be turned off without interrupting the measurement
- Integrated high-capacity battery life: Over 8 hours of continuous use
- Battery Charger with slow charge: to extend the life span of the battery
- Recharge the battery using a standard AC outlet
- Recharge the battery using a cigarette lighter (12V/24V): Optional
- RS485 Output: transfer measurements to a remote computer using a wired connection (up to 500 meters distance)
- Connect via Bluetooth®* to a computer, tablet or mobile phone to display remote measurements
- ON / OFF button: to avoid self-discharge of the battery during storage
- Simple battery charge level indicator
- Easy and intuitive recalibration function
- 2.8" Large display on TFT color graphic display:
 - Display of flow rate in lpm Liters per minute or gpm Gallons per minute (default setting)
 - Display of flow rate in m3/h (cubic meters per hour)
 - Pressure display in BAR or PSI (default setting)
 - Displaying the cumulative volume (with the possibility of resetting)
- User-friendly menus
- Flow and economic pressure measurement for a wide range of operating conditions while ensuring a certain degree of precision

Tel.: 03303 / 504066

Fax: 03303 / 504068

- Stabilizing legs for floor installation
- *Bluetooth® is a registered trademark of the Bluetooth SIG consortium.

8 • Strengths

- Multiple Connections: Cable, Bluetooth
- Intuitive controls via push button
- Excellent Price / performance ratio
- Wide measuring range
- Ability to change the display language (factory setting)
- Can be recalibrated
- Robust housing
- Very little maintenance
- Built-in charger
- Asymmetrical coupling possible



9 • Options and types

Available in different sizes depending on the flow to be measured:

DIAMETER	FLOW MEASUREMENT	PRESSURE	REFERENCE
DN40	20 lpm to 1500 lpm	0 to 16 bar	32972
DN65	300 lpm to 3500 lpm	0 to 16 bar	32973
DN80	500 lpm to 5000 lpm	0 to 16 bar	32974
DN100	750 lpm to 10000 lpm	0 to 16 bar	32975
DN150	2000 lpm to 25000 lpm	0 to 16 bar	33761

Charger for cigarette lighter 12V / 24V - 1.2A (009290)



Data transfer cable, 5 m in length with RS485 / RS232 converter (009291)



10 ● Measuring principle

10.1 - Flow measurement

The device uses the simple principle of measurement, using a spinning propeller on a horizontal axis. The rotation of the propeller generates pulses that are detected and measured by the electronic device. The rotational speed is proportional to the flow velocity of the fluid.

10.2 - Pressure measurement

The pressure measurement is calculated by means of a sensor using the proven ceramic cell technology. The cell signal is amplified and converted to an analog voltage used by the electronic device.

Tel.: 03303 / 504066



11 • Technical specifications

11.1 - Measurement system

Measuring principle	Flow Rate: Propeller Pressure: Ceramic cell
Primary functions	Measuring flow rate and water pressure

11.2 - Characteristics

MEASUREMENT RANGE			
Pressure	from 0 to 16 bar		
Flow rate:	from 20 lpm to 20000 lpm • DN40 : 20 lpm to 1500 lpm • DN65 : 300 lpm to 3500 lpm • DN80 : 500 lpm to 5000 lpm • DN100 : 750 lpm to 10000 lpm • DN150 : 2000 lpm to 25000 lpm		
REFERENCES			
DN40	32972		
DN65	32973		
DN80	32974		
DN100	32975		
DN150	33761		

COUPLINGS

Adaptable to all types of couplings, specify your preference when ordering (see POK catalog).

009291

DIMENSIONS

See dimensional drawings § 12.1, 12.2 et 12.3

See dimensional drawings § 12.1, 12.2 et 12.3

MATERIAL			
Flowmeter housing	Glass filled composite material		
Body	Aluminum alloy with hard anodized surface treatment		
Flow sensor	Delrin (highly-crystalline polymer)		
Pressure measurement	Coupling: stainless steel Membrane: Ceramic Al203		
Stabilizing legs	Aluminum alloy with hard anodized surface treatment		
Screws and nuts	Stainless steel		
OPTIONS			
Charger for cigarette lighter 12V/ 24V - 1.2A	009290		

Tel.: 03303 / 504066

Fax: 03303 / 504068

Data transfer cable, length 20m

with converter RS485 / RS232



DISPLAY AND USER MODE				
Graphic display	2.8" Graphic TFT color display Size: 43.2 X 57.6 mm Pixels: 240 X 320			
Control elements	Sealed push ON/OFF button with LED indicator Quick "SELECT" push button for use of the device			
Wired interface	BINDER 6 pin connection for the battery charger or the data transferable			
Interface without wires	Bluetooth Module 2.1 Scope: more than 100m in an open field Pairing Code: 1357			
DISPLAY FUNCTIONS				
Multi window displays	Window 1: - Flow rate in lpm or per gpm (factory setting) - Pressure in BAR or PSI (factory setting) Window 2: - Flow rate m³/h - Pressure in BAR or PSI (factory setting) Window 3: - Volume in m³ Window 4: - Calibration Mode			
Changing the display	Simply push the "SELECT" button and hold for a moment (0.5 s)			
Screen saver	Push the "SELECT" button and hold for more than 5 seconds			
Display functions	Window 1, 2 and 3 in French (default language) Window 4 in English (default language)			
POWERING ON				
Push the ON/OFF button once				
SETTING				
Display units	Adjust by 2 DIP internal switches			
Maximum flow rate	Adjust by 3 DIP internal switches			
CALIBRATION				
Calibration is possible by opening the housing and pushing an internal button				
CHARGER				
Type of charge	A constant current, then constant voltage			
Charge time	5 hours			
Input voltage	5 V (by USB jack)			

Tel.: 03303 / 504066

Fax: 03303 / 504068



BATTERY	
Туре	Lithium Ion Polymer
Capacity	1800 mAh
Nominal voltage	3,7 V
Consumption	190 mA with display on and Bluetooth® module and serial link activated 150 mA with display on and Bluetooth® module and serial link deactivated 90 mA with display off and Bluetooth® module and serial link activated 40 mA with display off and Bluetooth® module and serial link deactivated
Battery life	>8 hours with display on and serial link deactivated >40 hours with display off and serial link deactivated

11.3 - Measuring accuracy

REFERENCE CONDITIONS			
Products to measure	Water		
Temperature	+20°C		
Pressure	7 bar		
Upstream waterflow section	Identical water flow direction to that of the device		
MAXIMUM MEASUREMENT ERROR			
Flow measurement	+/- 1,5 %		
Pressure measurement	+/- 1 %		

11.4 - Conditions of use

TEMPERATURE		
Maximum operating temperature	+10°C to +60°C	
Maximum battery charge temperature	0°C to °40°C	
Maximum storage temperature	-20°C to +70°C	
PROTECTIVE CAPACITY OF THE ELECTRICAL ENCLOSURE EN60529		
IP65		

Tel.: 03303 / 504066



11.5 - Connection outlets

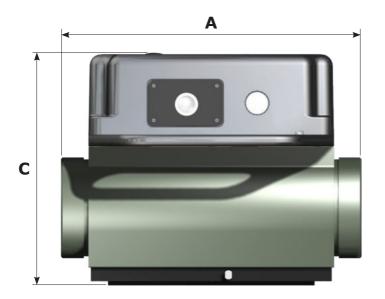
CABLE CONNECTION (RS485)	
Automatic connection detection	
Frame format	 Connection RS485 STX nnnnn LMP ddddd BAR pp.ppCRLF STX: Start Of Text (02H) nnnnn: sample number (0 to 65535) ddddd: flow value of 5 digits (0 to 9) pp.pp: pressure value of 4 digits (0 to 9) with a dot CR: Carriage Return (0DH) LF: Line Feed (0AH) Remarques: when the flowmeter is set up in GMP, LMP is replaced by GMP when the flowmeter is set up in PSI, BAR is replaced by PSI
Connection speed	9600 Bauds
BLUETOOTH® CONNECTION	
Automatic connection detection	
Frame format	 Bluetooth connection STX nnnnn LMP ddddd BAR pp.ppCRLF STX: Start Of Text (02H) nnnnn: sample number (0 to 65535) ddddd: flow value of 5 digits (0 to 9) pp.pp: pressure value of 4 digits (0 to 9) with a dot CR: Carriage Return (0DH) LF: Line Feed (0AH) Remarques: when the flowmeter is set up in GMP, LMP is replaced by GMP when the flowmeter is set up in PSI, BAR is replaced by PSI
Terminal name	POK V3
Pairing Code	1357

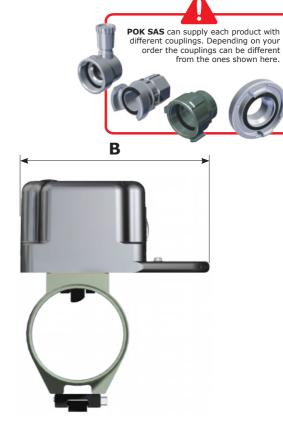
Tel.: 03303 / 504066

Fax: 03303 / 504068

12 • Dimensions

12.1 - Flowmeter





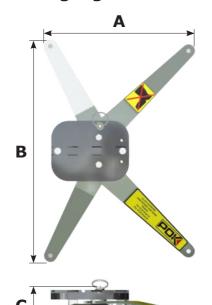


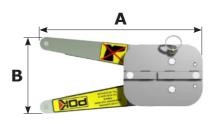
DIAMETER	A (mm)	B (mm)	C (mm)	WEIGHT (Kg)
DN40	250	166	160	2,93
DN65	255	166	184	3,37
DN80	263	166	199	3.55
DN100	268	173	220	4,07
DN150	274	199	272	5,27

Tel.: 03303 / 504066



12.2 - Stabilizing legs made in aluminium alloy

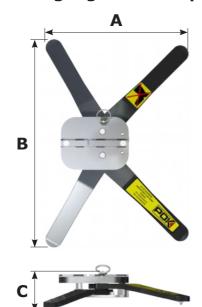


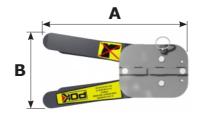




POSITION	A (mm)	B (mm)	C (mm)	WEIGHT (Kg)
Unfolded	349	513	91	2,63
Folded	370	173	91	2,63

12.3 - Stabilizing legs made in plastic







POSITION	A (mm)	B (mm)	C (mm)	WEIGHT (Kg)
Unfolded	378	550	103	2,63
Folded	380	197	103	2,63

Tel.: 03303 / 504066

Fax: 03303 / 504068

13 ● Preface

The device is intended to display the flowrates as indicated in §11.2. Outside of these temperature ranges the data is erroneous and is not guaranteed.

The various sensors may be damaged if an operating pressure of 16 BAR is exceeded.

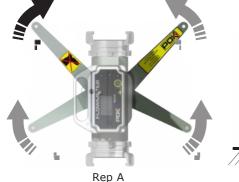
Always check the presence of the protective cap on the device, when no cable is connected.





14 ● Fold/Unfold

- 1 Unfold the stabilizing legs by pulling on them (Rep A)
- 2 Check if they are correctly attached to the flowmeter
- 3 Ensure all of the tips on the stabilizing legs are in contact with the ground and that the flowmeter can not slide or move (Rep B)
- 4 After use, pull the locking ring to disengage the locking mechanism to fold (Rep C)







Rep C



DO NOT WALK ON THE STABILIZING LEGS, OR PUT WEIGHT ON THEM, AS THIS **COULD DAMAGE THE LEGS.**

Tel.: 03303 / 504066

Fax: 03303 / 504068

Rep B



15 ● Functions of the Flowmeter

15.1 - Powering On

Powering on the device is done by pressing the ON/OFF button. An LED illuminates around the button to indicate the device is turned on.





15.2 - Powering Off

Powering off the device is done by pressing the ON/OFF button. The illuminating LED light turns off; indicating the power of the device is off.





INFORMATION When the flowmeter is powered off, the volume totalizer is reset to zero

Tel.: 03303 / 504066

15.3 - To start use

To start the flowmeter, momentarily press the "SELECT" button (0.5 seconds)



The home screen displays the POK logo and the firmware version.



Release V3.0.4

After 10 seconds, the device displays page 1, on which the flow measurement is displayed in lpm format (or gpm depending on the setting) and pressure BAR format (or PSI depending on the setting).

100%

LPM 00000

BAR 00.00

Tel.: 03303 / 504066

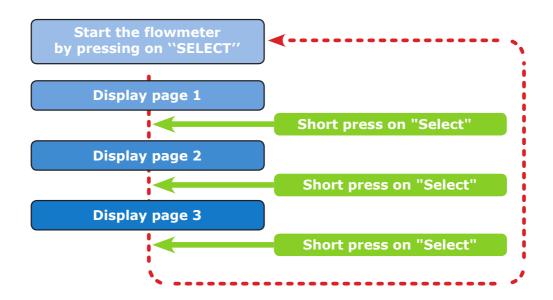
Fax: 03303 / 504068

The screen also displays the percentage of battery life (from 0 to 100 %) associated with a symbol.



15.4 - Changing the display

When the device is powered on, it has multiple display windows. The transition from one window to another is done by momentarily pressing the "SELECT" button (0.5 seconds):





100%

LPM

00000

BAR

00.00



Display page 2

100%

M³h

00000

Tel.: 03303 / 504066

Fax: 03303 / 504068

BAR 00.00

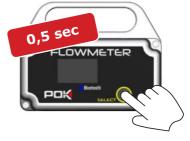


Display page 3

Volume (m³)

00000





15.5 - Resetting the sample number to zero

Reset the sample number of the Bluetooth® or RS485 connection by activating the serial connection (see

§15.8)







15.6 - Resetting the volume to zero

Page three measures the volume of total water. Reset the volume by pushing the "SELECT" button for five seconds.



INFORMATION Reset can only be done only when flowmeter is on display page 3

INFORMATION When the flowmeter is powered off, the volume totalizator is reset to zero

When the screen saver is active, the totalizator is not reset to zero

15.7 - Battery saver

To activate the battery saver, simply press the push button "SELECT" for more than 5 seconds, while on page 1 or page 2. In screen saver mode, the unit continues to operate normally; only the display is turned off.



To turn on the display from screen saver mode, press the push button "SELECT" for 5 seconds.



INFORMATION When the unit is in standby, the totalizator cannot be reset to zero.

The screen saver mode can be enabled even if a host is connected to the device.

Tel.: 03303 / 504066

Fax: 03303 / 504068



15.8 - Bluetooth® or serial connection activation

The Bluetooth® and serial connections are not activated when starting the flowmeter. Their activation is enabled (both together) by pushing « SELECT » button for 2 seconds.

A further pressure on « SELECT » button for 2 seconds deactivate Bluetooth® and serial connections.



When the connections are switched on, the symbol INFORMATION Bluetooth® " $\mbox{\ensuremath{\mbox{$\chi$}}}$ " flashes on the screen.

M³h

BAR 06.12

When the connections are switched off, the symbol INFORMATION Bluetooth® "* " disapears.

M³h 00307

BAR 06.12

When connections are switched on and the flowmeter INFORMATION

is connected to a remote host by Bluetooth®, the symbol Bluetooth® "*" is fixed on the screen.

M³h 00307

BAR 06.12

When connections are switched on and the INFORMATION

flowmeter is connected to a remote host by serial link, the symbol Bluetooth® " * " still flashes on

M³h

BAR

Connections can be actived or deactived only from **INFORMATION** page 1 and 2.

15.9 - Low battery

the screen.

The device measures the charge level of the battery, in real time, and displays it on each page in the top right corner.

The value varies between 0 and 100%.

When the charge level is between 10% and 20% the display screen on pages 1,2 and 3 turns yellow.

Volume (m³)



When the charge level of the battery reaches less than 10%, the display screen flashes red (on pages 1, 2

Tel.: 03303 / 504066

Fax: 03303 / 504068

Volume (m³)



15.8 - Bluetooth® or serial connection activation

The Bluetooth® and serial connections are not activated when starting the flowmeter. Their activation is enabled (both together) by pushing « SELECT » button for 2 seconds.

A further pressure on « SELECT » button for 2 seconds deactivate Bluetooth® and serial connections.



When the connections are switched on, the symbol INFORMATION Bluetooth® " $\mbox{\ensuremath{\mbox{$\chi$}}}$ " flashes on the screen.

M³h

BAR 06.12

When the connections are switched off, the symbol INFORMATION Bluetooth® "* " disapears.

M³h 00307

BAR 06.12

When connections are switched on and the flowmeter INFORMATION

is connected to a remote host by Bluetooth®, the symbol Bluetooth® "*" is fixed on the screen.

M³h 00307

BAR 06.12

When connections are switched on and the INFORMATION

flowmeter is connected to a remote host by serial link, the symbol Bluetooth® " * " still flashes on the screen.

M³h **BAR**

Connections can be actived or deactived only from **INFORMATION**

page 1 and 2.

15.9 - Low battery

The device measures the charge level of the battery, in real time, and displays it on each page in the top right corner.

The value varies between 0 and 100%.

When the charge level is between 10% and 20% the display screen on pages 1,2 and 3 turns yellow.

Volume (m³)



When the charge level of the battery reaches less than 10%, the display screen flashes red (on pages 1, 2 or 3).

Tel.: 03303 / 504066

Fax: 03303 / 504068

Volume (m³)

MOP



15.10 - Charging the battery

To recharge the battery, plug the charger 38695 or TC009290 to the flowmeter. The charging cycle automatically starts.

These symbols " (₩



" and " flash and indicate that charging is in progress."

Volume (m³)



Once charging is complete, the battery symbol is fixed on the screen as well as the charge level (100%)



Volume (m³)

Once charging is complete, if you are not using the flowmeter right away, switch it off by pressing the ON/ OFF button.

INFORMATION The charging begin regardless of the "ON/OFF" button position (pressed or not).

The charging can be stopped at any time by disconnecting the charger, then the flowmeter INFORMATION indicate the charging level of the battery.

INFORMATION The flowmeter is fully operable during the charging

15.11 - Using the charger as a external power supply

This symbol " * ":

- is not lit when the serial connections (Bluetooth® and serial) are deactivated;
- flashes when the serial connections (Bluetooth® and serial) are activated;
- is fixed when a remote Bluetooth® host is connected to the device.



Tel.: 03303 / 504066



15.13 - Connecting to a host

The device can be connected to a remote computer either by Bluetooth connection or by wire connection.

• 15.11.1 Bluetooth Connection

To connect via a Bluetooth connection, search for the device POK V3 and establish the connection.

Bluetooth Settings: Terminal name: POK V3

Pairing Code: 1357

• 15.11.2 Wire Connection

To connect by wire connection, connect the cable (009291) between the device and the computer.

Wire Connection Settings: Speed: 9600 Bauds

Data: 8 Bits, no parity, no flow control

15.14 - Applications for a smart phone

Many applications are available from Google Play or Windows. Applications running on most of the smart phone: 8 bits, no parity, no flow control

BTTerminal (DevFor8)



- Bluetooth Serial Terminal (NM
- NMinion
 BT
 Serial
 Terminal
- TerminalBT (identity)
- Display in list form of the mea





Tel.: 03303 / 504066

Fax: 03303 / 504068

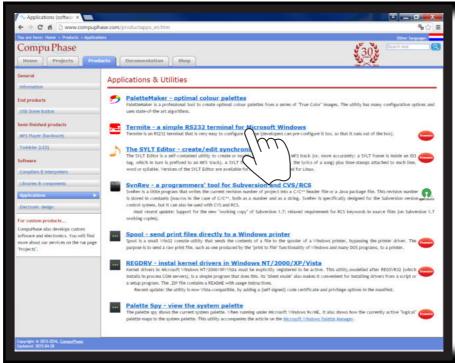
16 • Use of software Termite

16.1 - Installation of Termite

• 16.1.1 Please go to: http://www.compuphase.com, and in the tab "Products"



• 16.1.2 Click on "Applications" and then on "Termite - a simple RS232 terminal for Microsoft Windows"



Tel.: 03303 / 504066

- 16.1.3 Download "Termite version 3.2 complete Setup"
- 16.1.4 Install "Termite version 3.2" on the computer



16.2 - Wired connection

- Turn off the flowmeter
- Connect the cable 009291 to the PC (via USB)



• Connect the other side of the cable 009291 to the flowmeter



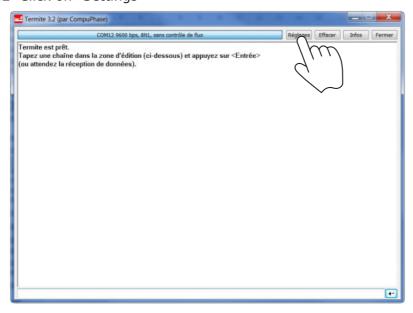
• Turn on the flowmeter

16.3 - Setup software Termite

• 16.3.1 Launch Termite



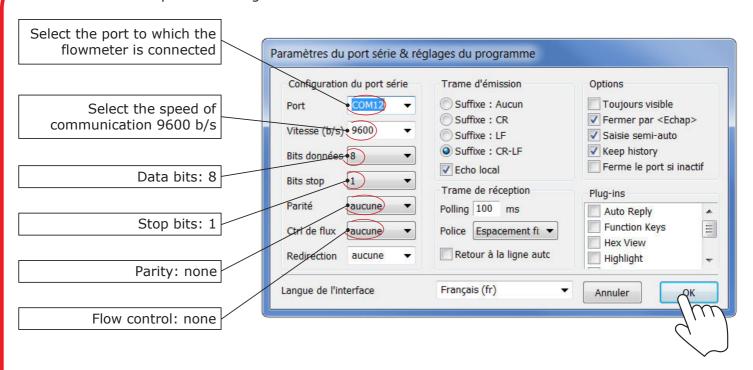
• 16.3.2 Click on "Settings"



Tel.: 03303 / 504066

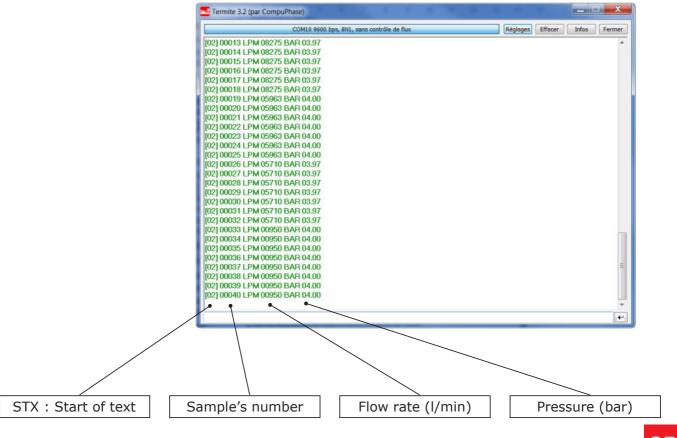
Fax: 03303 / 504068

• 16.3.3 Setup the following items then click on "OK"



16.4 - Read and save data

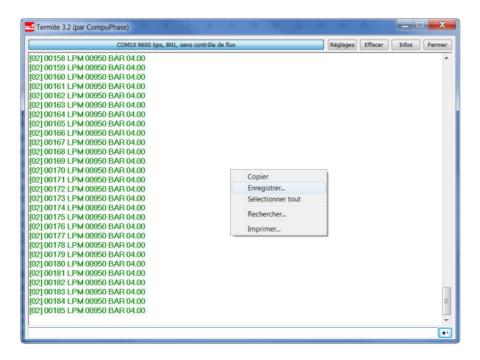
• 16.4.1 Datas collected by the flowmeter are displayed on Termite as below



Tel.: 03303 / 504066



• 16.4.2 To save the file, right-click and then select "save..."



• 16.4.3 Then save the file in .txt format



Tel.: 03303 / 504066

Fax: 03303 / 504068

17 • Specifications for installation

Take the following precautions to ensure a proper set up:

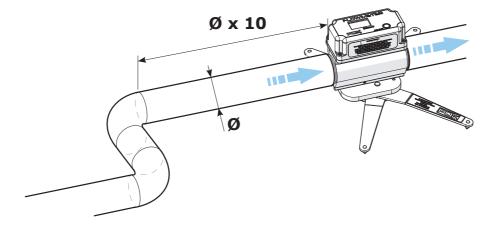
- Provide enough space on the sides of the device (with stabilizing legs extended)
- Protect the unit against prolonged exposure to direct sunlight and install protection if necessary



• Do not submit the device to intense vibration



• With **an elbow of 2 dimensions upstream** of the flowmeter, insert a section of straight line **greater than 10 times the diameter** of the flowmeter (between the elbow and the flowmeter)

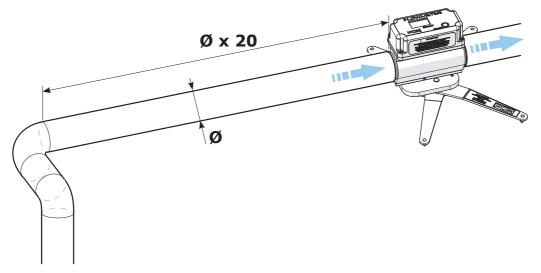


Tel.: 03303 / 504066

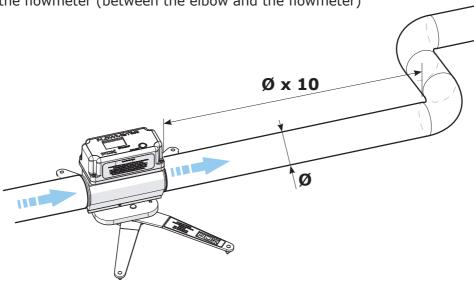
Fax: 03303 / 504068



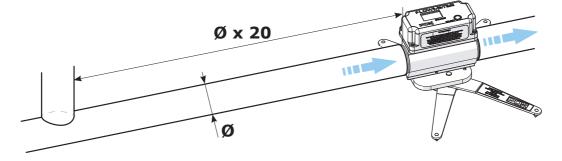
• With **an elbow of 3 dimensions upstream** of the flowmeter, insert a section of straight line **greater than 20 times the diameter** of the flowmeter (between the elbow and the flowmeter)



• With **an elbow downstream** of the flowmeter, insert a section of straight line **greater than 10 times the diameter** of the flowmeter (between the elbow and the flowmeter)



• With a **T section upstream** of the flowmeter, insert a section of straight line **greater than 20 times the diameter** of the flowmeter, between the flowmeter and the T section



Tel.: 03303 / 504066

Fax: 03303 / 504068

18 • Care and maintenance of the device

18.1 - Safety instructions



For all maintenance work on the flowmeter, make sure the water supply is cut off.

18.2 - General preventive maintenance

POK devices require little maintenance if you follow the instructions in this technical manual. However POK recommends performing the following preventive steps:

• Cleaning the unit with a soft cloth soaked in white spirit or soapy water (do not use a chemical solvent)

Tel.: 03303 / 504066

- Drain, if necessary, as water could stagnate in the device (when working outdoors)
- Check the apparent good working condition of the device



7				
_				
		· · · · · · · · · · · · · · · · · · ·		
-				

MOP_MES_01343_EN_D - 07/12/2016 - Copyright© POK SAS - Illustrations are only informative