



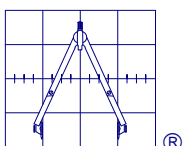
Gas detection control system EXcetera-L



Operator Manual

September 2015

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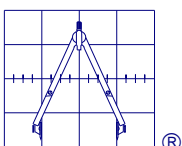
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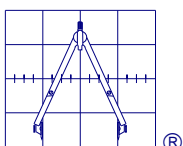
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WARNING:

EXcetera® is a programmable gas detection control panel, manufactured by OGGIONI S.a.s.
Changes into the EXcetera® functioning parameters, made by not trained or competent people can significantly modify functionalities of the gas detection system and the device itself.
OGGIONI S.a.s. will not be responsible for any damage or problem caused by improper changes into EXcetera® functionalities.

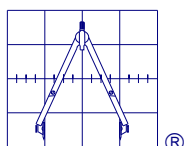


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1. GENERAL DESCRIPTION

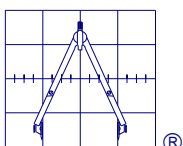
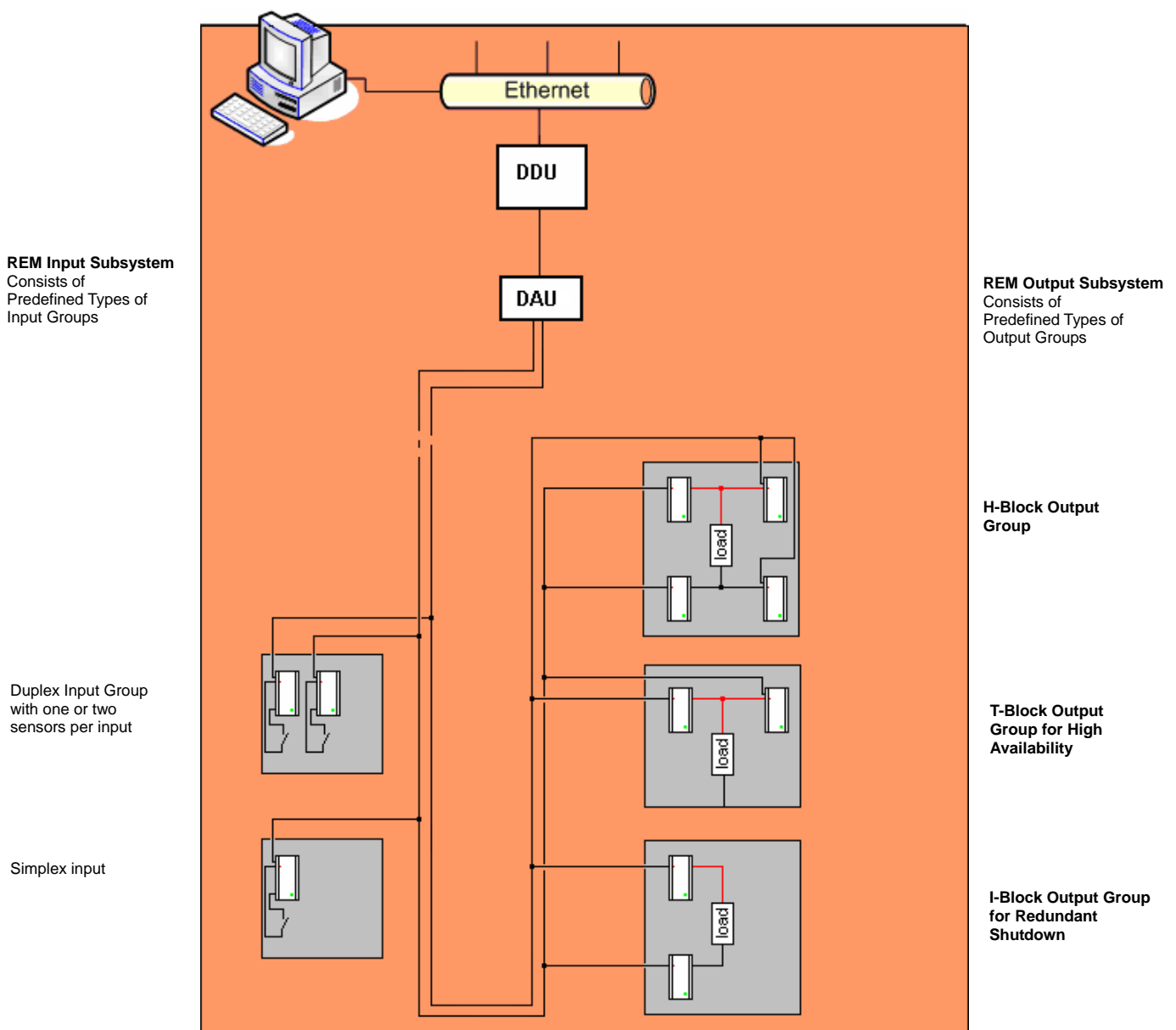
EXcetera® control unit has been developed following the EN 61508 functional security standard and the EN 50402 gas detection specific standard.

EXcetera® System

EXcetera® is a programmable control system to reach the SIL1/SIL2 Safety Integrity Level, based on a dual core ARM controller.

The basic parts of an EXcetera® system are the REM input subsystem, the Data Acquisition Unit (DAUs) the Data Display Unit (DDU) and the REM output subsystem.

These subsystems can be designed to provide the exact mix of redundant and non-redundant discrete and analogue equipment needed for a broad range of critical control applications.



The DAU Subsystem

The EXcetera® normally consists of a Data Acquisition Units (DAU) connected to sensors or I/O modules, via a serial bus system and Data Display Unit (DDU) for the operator interface functions. The DAU receives all inputs and performs voting for discrete inputs and value selection for analogue inputs, computes the required outputs as a function of the inputs and sends its own output data on the busses.

Processor Configuration Options

Processor Redundancy	Description	Expected Safety Function SIL Rating
Simplex	Single Processor (EXcetera Light)	1
Simplex D	Single Processor with dual bus using 1oo1d, H-block, I-block or Tblock outputs	2
Duplex ^(*) (1oo2)	Dual processor with output voting 2oo2 / 1oo2 ⇒ 1oo1 using 1oo1d, H-block, I-block or T-block outputs	2

Input Configuration Options

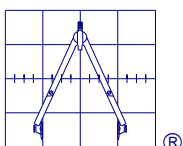
Detector Redundancy	Safety Function Voting	Input Unit Type	Minimum Input Channels per Detector	Minimum Number of Inputs Units	Expected Safety Function SIL Rating
Simplex	1oo1	Digital	1	1	1
		Analogue	1	1	
Simplex	1oo1	Digital	1	1	2
		Analogue	2	2	
Duplex ^(*)	1oo2	Digital	1	2	2
		Analogue	1	2	

^(*) Not Available for EXcetera light configuration

Output Configuration Options

Actuator Redundancy	Safety Function Voting	Output Safe State	Output Configuration (per actuator)	Expected Safety Function SIL Rating
Simplex	1oo1	Energized or De-energized	Single block	1
Simplex	1oo1	De-energized	1oo1d	2
Simplex ^(*)	1oo2	De-energized	I-block / H-block	3
Simplex ^(*)	1oo2	Energized	T-block / H-block	3
Simplex ^(*)	1oo2d	De-energized	H-block	3
Simplex ^(*)	1oo2d	Energized	H-block	3
Duplex	1oo2	De-energized	Single¥, I-block, 1oo1d, H-block	3
Duplex	1oo2	Energized	Single¥, T-block, H-block	3

¥Output signals must be on different output units



1.1 Main System features

Here below are the main technical characteristics of EXcetera® control unit:

CPU Freescale i.MX 6 ARM Cortex-A9 Dual core 1GHz

GPU Vivante GC 880 + Vivante GC 320

Integrated accelerators for 2D, OpenGL® ES2.0 3D and OpenVG™

Atmel SAM3X8E ARM Cortex-M3 CPU

RAM DDR3 1GB

HDMI and LVDS + Touch

2 Micro USB (1 OTG type a+b)

2 USB type A (x2) and 1 USB connector (requires a specific wire)

Micro SD card reader (boot device)

Local LCD TFT 7" touch Display

System status LED indications

For RS-485 Modbus RTU serial lines, used to connect the devices in the field

One RS-485 Modbus RTU serial lines dedicated for remote controller, DCS, BMS, PLC etc.

One optical fibre 62.5/125um (3,5dB/Km.) ST Drivers

Addressing possibility for max 253 devices

Eight Programmable relay outputs

Eight 0-5V or 4-20mA analogue inputs

Six Opto coupled Digital Inputs

System status assignments on Local EXcetera® relay outputs

Status	Relay Output	Mode	Status	Condition
Fault	4	Reflex	N.E.	Enabled
Attention First alarm lev.	1	Reflex	N.D.	Enabled
Warn Second alarm lev.	2	Reflex	N.D.	Enabled
Alarm Third alarm lev.	3	Latch	N.D.	Enabled
Siren	5	Reflex	N.D.	Enabled
Unset/Maintenance	6	Reflex	N.D.	Enabled
Power failure	7	Reflex	N.E.	Enabled
Overrange	8	Latch	N.D.	Enabled

(*) N.E.:Normally Energized, N.D.:Normally De-energized

LED Indicators

8 x red LED corresponding to the relays status

6 x green LED corresponding to the digital inputs status

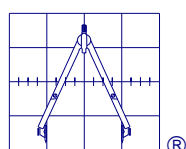
1 x green LED corresponding to the presence of Power supply

2 x blue LED corresponding to the Tx and Rx signals of the COM lines.

2 x yellow LED to report errors on the COM ports.

5 x red LED for each RS-485 TX signal

5 x green LED for each RS-485 RX signal

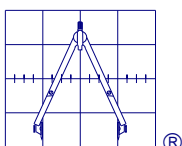


Different configurations available:

- Open Frame
- In a box for wall mounting
- In a 19" Rack

1.2 Software features

- The program code and the parameters configuration are protected against non authorized alterations.
The operator will not have the possibility to modify the software functions.
- The parameters assignment in the configuration software is automatically verified for its validity.
Invalid entries will be rejected.
- Only authorized personnel can modify the configuration using a high-level password
- The program codes updating is under the manufacturer control. The download of a new software version will be possible only with Oggioni s.a.s. authorization.
- The user is able to identify the installed program code version (Firmware). The Firmware version installed on CM80-ID unit and on the REM concentrators is showed on LCD Display during system start-up time.



2. OPERATION MODE

EXcetera® is a system designed to detect gas following the EN 50402 standard. Then the operating mode will reflect the requirements of the standard.

The measurement method will be the standard one, ie the input signals of the detectors in the field must fall within the range set.

Within this range, the system is able to identify Five operating conditions:

NORMAL CONDITION

The device is in normal condition, there are no fault and no alarms.

ALARM CONDITION

This is the measurement condition of the system, when at least one alarm threshold in at least one channel has been exceeded.

The event will be memorized in the event log with the details of the concerned threshold.

Depending on the settings, the outputs will activate and automatically return in normal mode when the alarm condition will be terminated or they will remain latched and it will be necessary to reset them manually when the setting is a LATCH type.

If latched, the reset is done by an action of ACKNOWLEDGEMENT and RESET to be done by password from authorized personnel.

FAULT CONDITION

- One or more transmitters detect signals outside the measuring range (Under range or Over range).
- The self-diagnosis procedures of one or more system devices reported abnormal conditions.
- The detector is in fault condition because of an incorrect calibration procedure.
- Interruption of the serial line communication or lack of power to the detector.

The event is memorized in the event log with the concerned fault device details.

CALIBRATION CONDITION

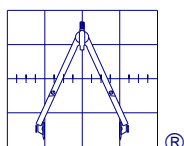
The EXcetera® central unit can automatically recognize if a Gas Detector is in calibration mode.

MAINTENANCE CONDITION

If authorized, the operator can intentionally exclude a system part for maintenance, calibration, parameters configuration, functional tests, etc.

In this case one or more devices, enabled and connected to the serial loop, can be disabled or taken to test mode to avoid alarms.

Depending from the programming, the outputs associated with these operating states will activate and will return automatically in a normal mode when the trigger condition will be terminated, or (if latched) they will remain memorized and a manual reset will be necessary by an authorized operator for AKNOWLWDGEMENT and RESET through a password.



3. HARDWARE ARCHITECTURE

3.1 SERIAL PORTS

The For serial lines are configurable by an internal controller.

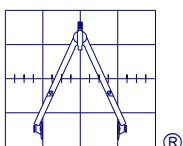
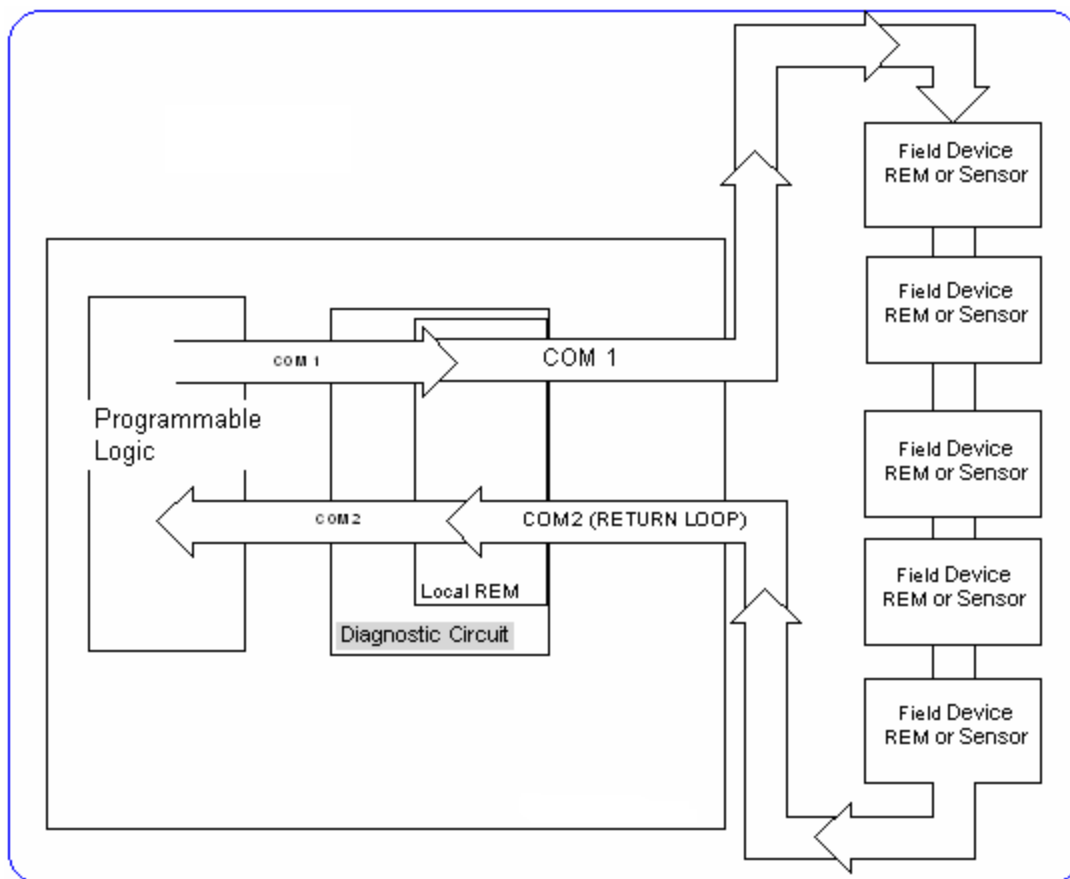
All the serial lines can be configured in two closed loop or on for independent open lines.

3.2 CLOSED loop configuration

COM1 being on one side of the loop and COM2 on the other side, the same for COM3 and COM4

In this case, the system reliability is higher, in fact a mechanical interruption of the loop will not disconnect any device from the controller.

All the devices will be accessible from both sides of the loop, through all the COM ports.

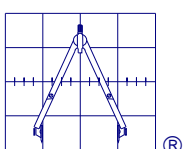
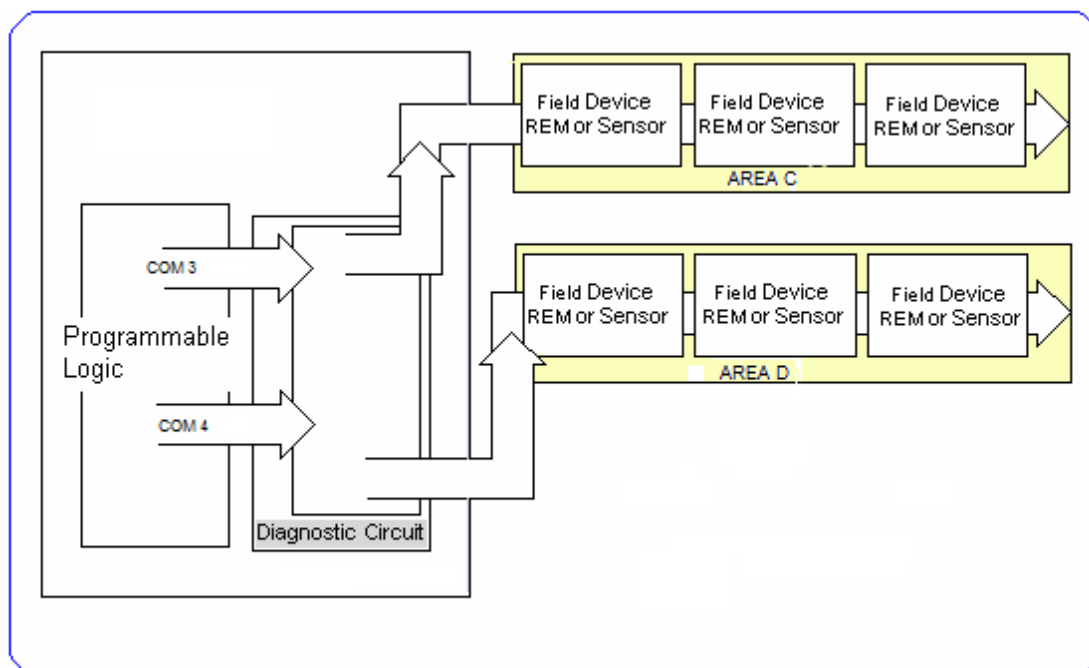
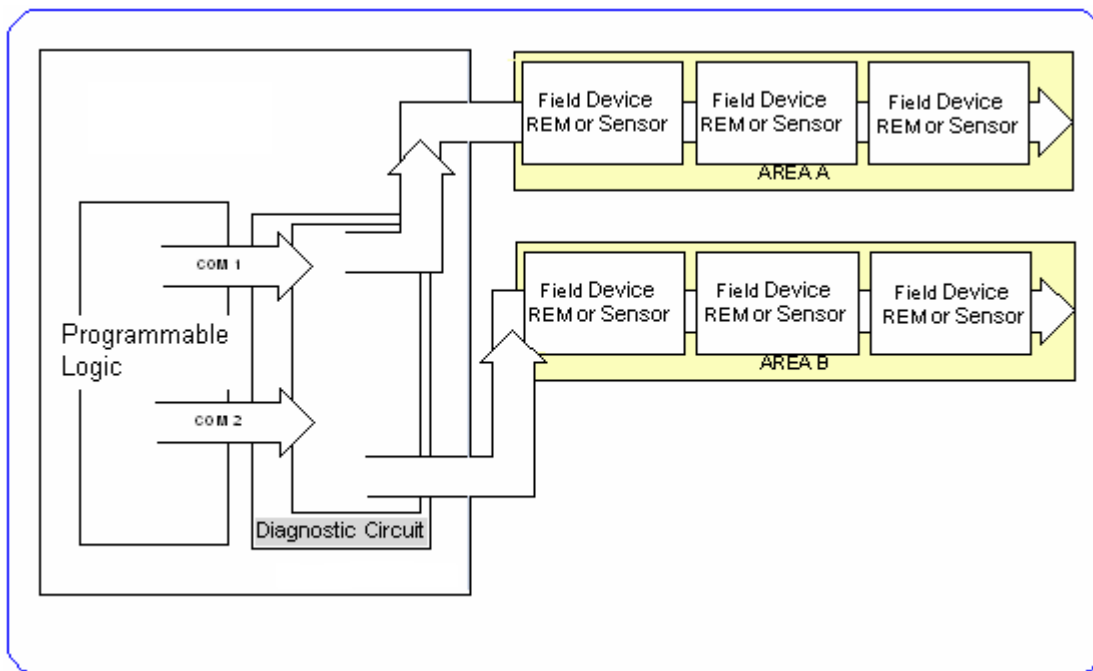


3.3 OPEN loop Configuration

With this configuration the second serial lines is an independent loop.

In this case if the loop is cut off by a mechanical interruption, all devices connected to the damaged part of the serial line will not be accessible any more.

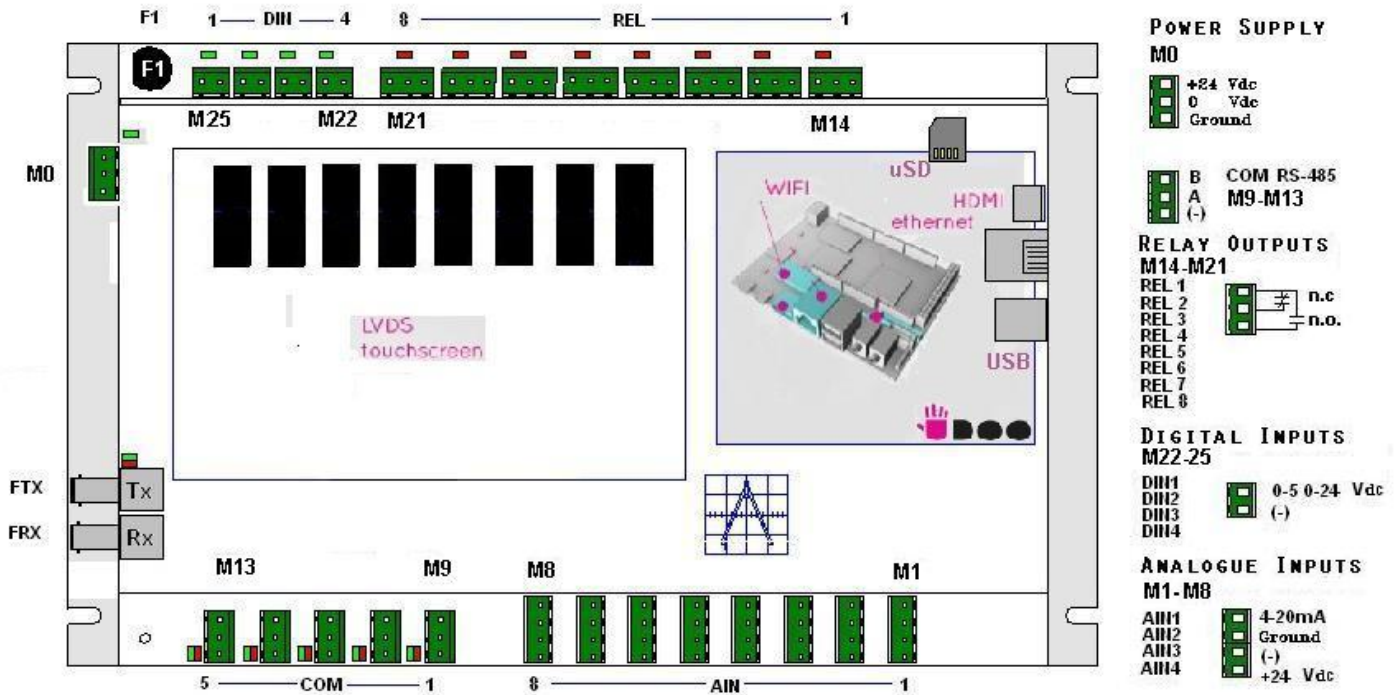
Using this configuration, the system is virtually divided in for different to which are assigned respectively the COM1, COM2, COM3 and COM4 ports



4. ELECTRICAL CONNECTIONS

Connections are made via screw terminals accepting the following wire sections:
 #22 AWG ÷ #14 AWG (0.5 ÷ 2.5 mm²).

Before powering up the device, ensure that all electrical connections have been completed and are correct.



4.1 System Power

The EXcetera® control units must be powered with 24 Vdc to terminal (M0).

Before proceeding with installation verify the current consumption of the devices connected to the system (sensors, concentrators, actuators, etc.)

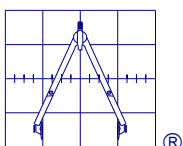
Use an external power supply with an adequate power and verify that the device has an appropriate EMC filter according to current standards.

4.1.1 Overload control

All the supply outputs from the central units are current limited at 250 mA.

4.1.2 System Supply Sizing

Device	Consumption
Enose RAS or DUST type With catalytic sensor	1,9 W
Enose RAS or DUST type With HQ catalytic sensor	2 W
Enose RAS or DUST type With IR sensor	2,2 W
Enose RAS or DUST type With electrochemical cell	1 W
REM remote concentrator	4 W
Bluetooth™ Repeater	1 W



4.2 Terminal Block Assignments

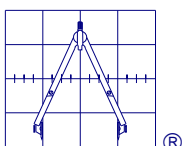
Terminal M0	Pin	Description Power Supply Input
GND	3	Ground
(-)	2	- 24 Vdc
(+)	1	+24 Vdc

Terminal M1-M8	Pin	Description
4-20 mA	4	4-20 mA Input
GND	3	Ground
(-)	2	Common -24Vc
(+)	1	+24Vdc detector power supply

Terminal M9-M13	Pin	Description Com1- Com5 serial RS 485
B	3	(B) standard EIA RS 485
A	2	(A) standard EIA RS 485
(-)	1	Common negative

Terminal M14-M21	Pin	Description Relays Output
C	3	Common
N.C.	2	Contact N.O. 3A 30Vdc/110Vac
N.O.	1	Contact N.O. 3A 30Vdc/110Vac

Terminal M22-M25	Pin	Description Digital Inputs
1A	1	$10 \div 24V_{cc}/V_{ac}$ * Power input
1B	2	$10 \div 24V_{cc}/V_{ac}$ * Power input
2A	3	$10 \div 24V_{cc}/V_{ac}$ * Power input
2B	4	$10 \div 24V_{cc}/V_{ac}$ * Power input

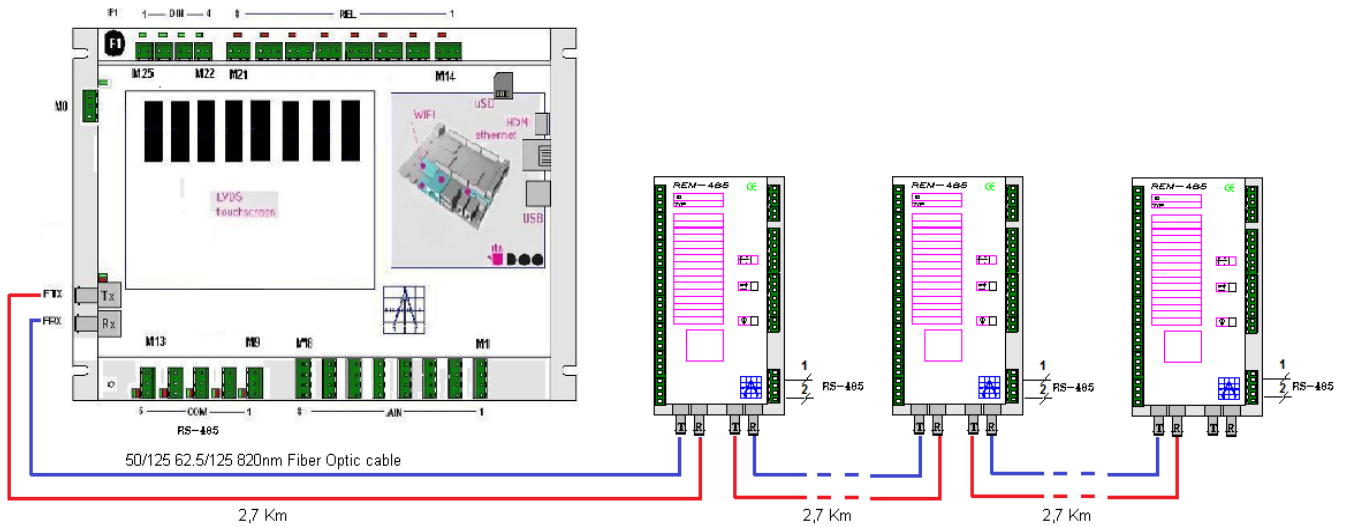


4.3 820 nm Fiber Optic Communication

For distance extension communication link, in the the Excetera controller are available high performance Fiber optic drivers.

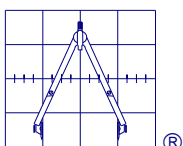
The transmitter and receiver are compatible with two popular optcal fiber size 50/125 mm and 62.5/125 mm

4.3.1 Optical loop configuration



Features

- Link distance up to 2,7 Km
- 820 nm wavelnght
- ST connections with 0.2 dB typical
- Auto-insertable
- Specified for 50/125 um and 62.5/125 um fiber
- Hight reliability AlGaAs Emitters



5. INSTALLATION

Before proceeding with installation please follow some simple practical rules:

- Identify the most suitable position for the control unit installation and the requirements for the cabling system.

WARNING: the identified area to install the control unit and the REM concentrators must be out of the hazardous areas (with explosion danger), there must not be presence of gas or corrosive substances and the operating temperature and humidity environment limits must be respected.

- Check that the voltages and currents of power supply requirements are appropriate.
- Depending on the central unit configuration that you are using, install the EXcetera® control unit (if open frame) or the 19" rack and their accessories, if any, in the cabinet.

Make the connections of the power supply, paying particular attention to the ground circuit. DO NOT POWER the control unit during this phase.

- In case of a system with distributed sensors and/or concentrators, proceed with the installation of all devices in the field and complete the connections with the EXcetera® central unit. Carefully check connections of the serial communication line to make sure that nothing has been reversed on the signals.

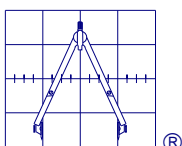
As already mentioned, the serial loop follows the RS-485 standard, therefore it will be impossible to create star-type configurations, all devices must be connected linearly and it must be installed an "end of line" resistor on the last component on the loop.

WARNING : if the sensors are installed in classified hazardous areas with explosion danger, carefully follow the instructions provided by the current standards for this type of plant.

- Connect the actuators or the alarm devices to the respective output terminals.

At the end of all the installation and wiring operations and before to power up the installation carefully check that all the electrical connections have been done correctly.

The EXcetera® central unit and all the connected devices must be installed in accordance with the indications given by the EN60079-14 standard.



5.1 Guidelines for a proper installation

To comply with EMC EN 50270 standards (Electromagnetic Compatibility), you should observe some simple points during the installation.

In General:

The chosen area where to install the central unit must not be interested with hard electromagnetic interferences.

The power supply input must have a line filter type FN 660 (Schaffner) or equivalent.

The power supply units (external 24 Vdc) it has to be protected by a line filter type FN 2060 (Schaffner) or equivalent.

For the connection of the devices shielded cables with a minimum coverage of 80% must be used. The shields must be connected only by the control unit side in the ground point, through a good electrical connection with minimum resistance.

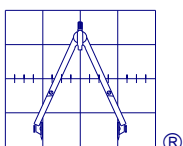
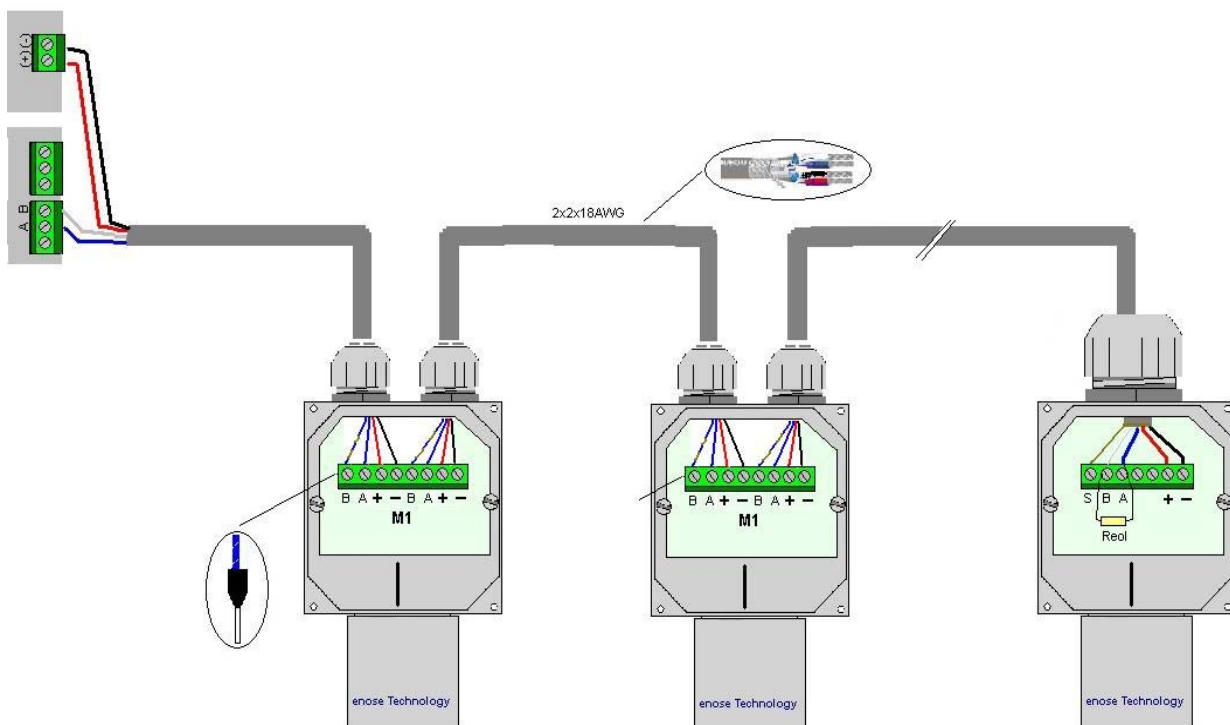
The serial communication cables must be adequately protected and must be kept separate from the primary power supply or power ones ($d > 30$ cm).

Also there must not be any potential difference between the shield and the ground.



For Oggioni eNose® Gas Transmitters or remote modules connection it is recommended to use the data transmission cables EIA RS-485/422 2x2x18/7 type TELDOR 9FA9D2Z or equivalent.

An "end of line" resistor ($R_{eol}=120R$) must be placed on the last device connected on the serial loop, while on the control unit side the resistor is already internally connected.



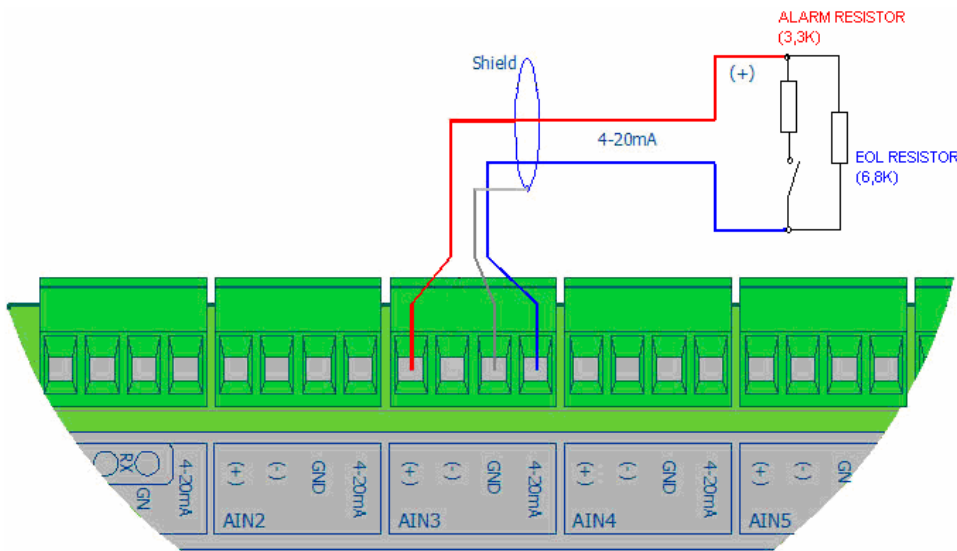
5.1.1 Digital Inputs

To activate the digital inputs, you have to apply a tension of 5 to 24 Vcc/ac.
For higher tensions we recommend to use a 20mA current limiting resistance.

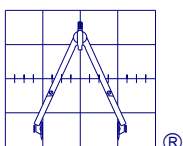
5.2 Power loop threshold inputs

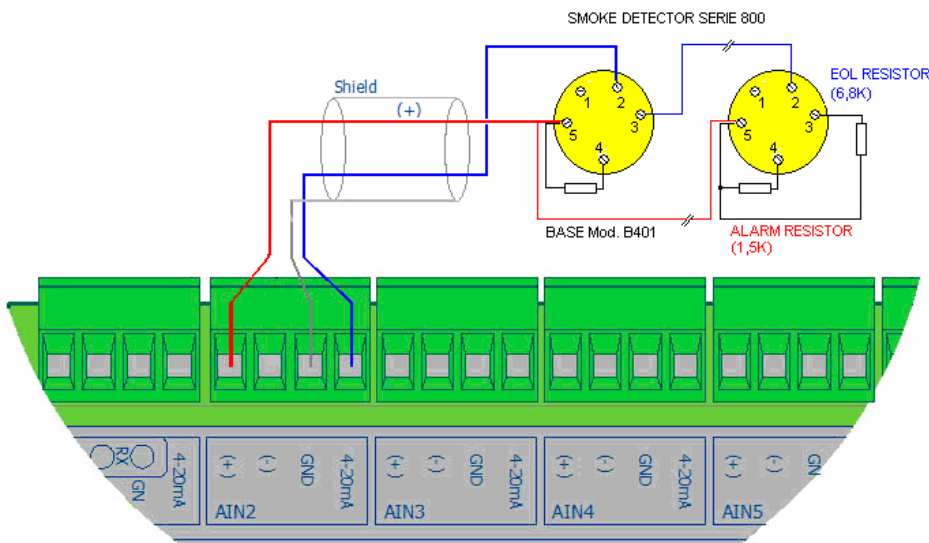
The M1 and M8 terminals are designed to connect the devices with 0-20mA threshold current loop, a service power supply is also available on the terminals for any sensor as for example heat detectors, Smoke or Flame sensors, , manual alarm push buttons etc.

These inputs can be used to realize lamps tests or to monitor relays contacts status.

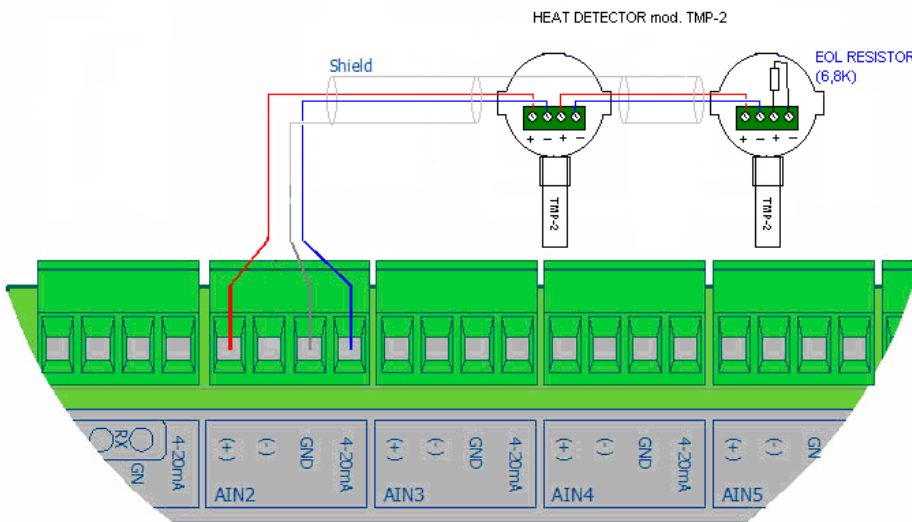


Example of connection with the alarm push button.

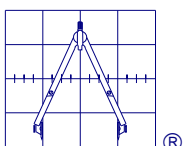




Example of connection with Honeywell smoke detectors



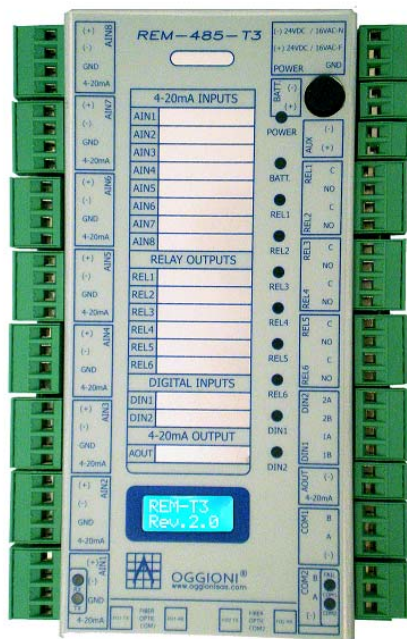
Example of connection with Oggioni TMP-2 Heat detectors



5.3 *REM-485 T3 Remote Concentrators*

The REM-485 modules are remote concentrators that can be connected to BUS RS-485. The general features are similar to the inner module of the *Excetera*[®] central unit:

5.3.1 REM modules technical features



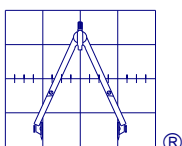
- 1 LCD Display 8x2 diagnostic characters for the states display
- 7 analogue 0-20mA input
- 6 SPST relays outputs
- 2 opto isolated digital inputs
- 2 Standard serial Ports RS-485 Modbus RTU
- 2 Drivers for Optical cable 62.5/125um ST type.

5.3.2 LED Indicators

- 1 Green LED corresponding to power supply;
- 1 Green LED corresponding to Battery presence;
- 6 Red LED corresponding to the 6 outputs;
- 2 Blue LED signalling active communications on the RS-485 loops;
- 2 Yellow LED signalling a fault respectively on the two RS-485 serial lines.

5.4 REM Modules configuration

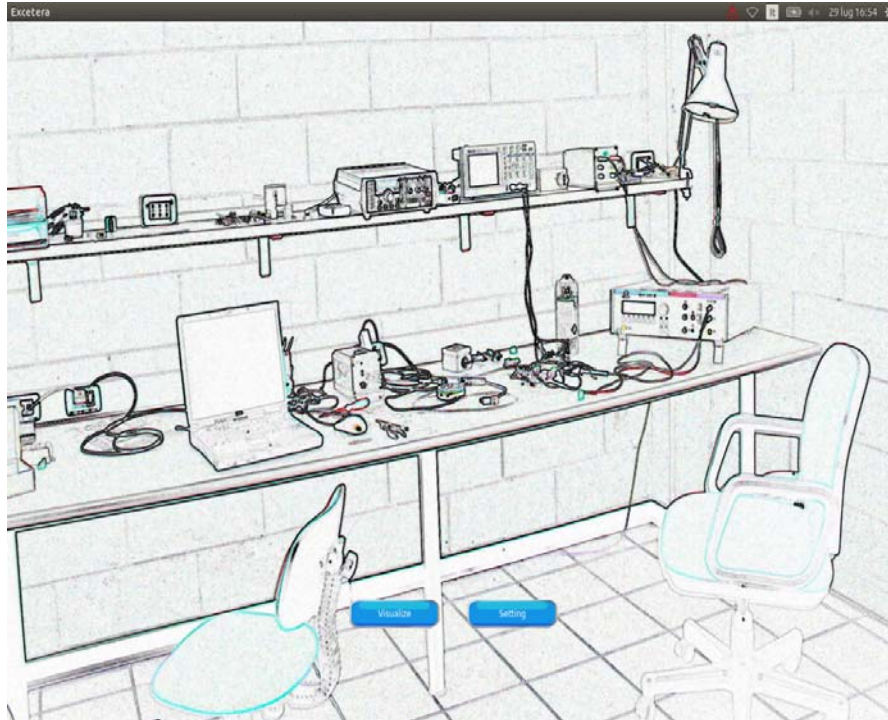
The REM modules can be configured directly from the *Excetera*[®] central unit. In case of communication loss with the central unit, every REM module can assign a configuration of the emergency outputs to guarantee the security of the controlled system



6. SOFTWARE STRUCTURE

From the initial page, with a mouse double click anywhere on the screen you will accede a second page where you can chose to visualize just the status of the connected devices or enter in the setting to configure the system.

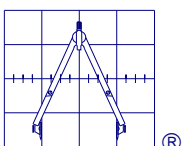
For this second option you will be required with a password of technical level (default 6666) .

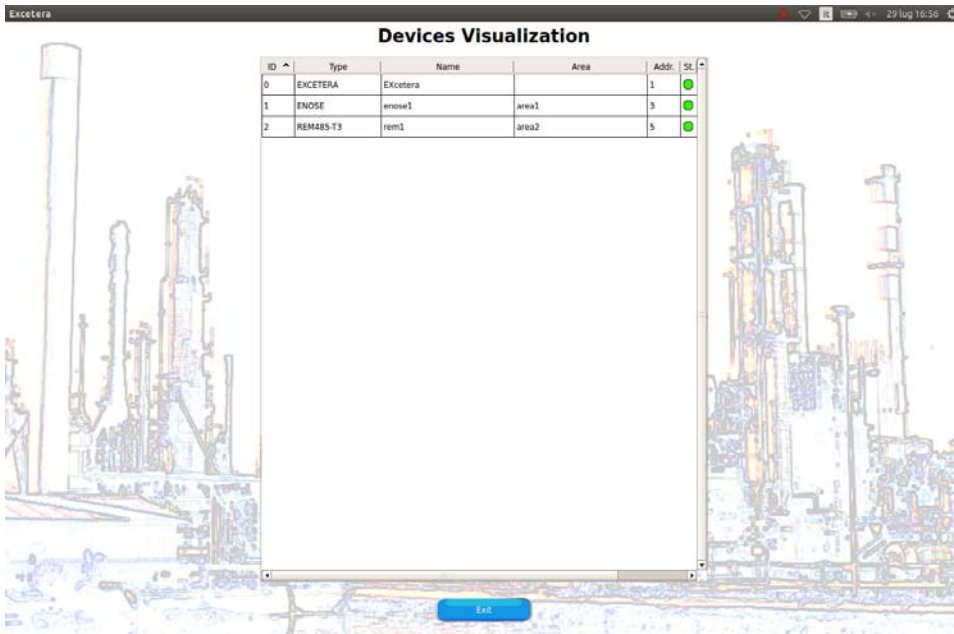


6.1 VISUALIZE

On this page you can visualize all the connected devices and their identifying information:

ID	Assigned position in the memory table of Excetera
Tipo	Kind of connected device
Nome	Device identifying label
Area	Installation area
Ind.	Device address
St.	Device status Green = normal; Yellow = Fault; Red = Alarm; Grey = Communication Fault; White = Disabled





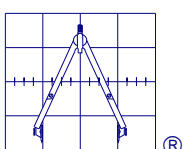
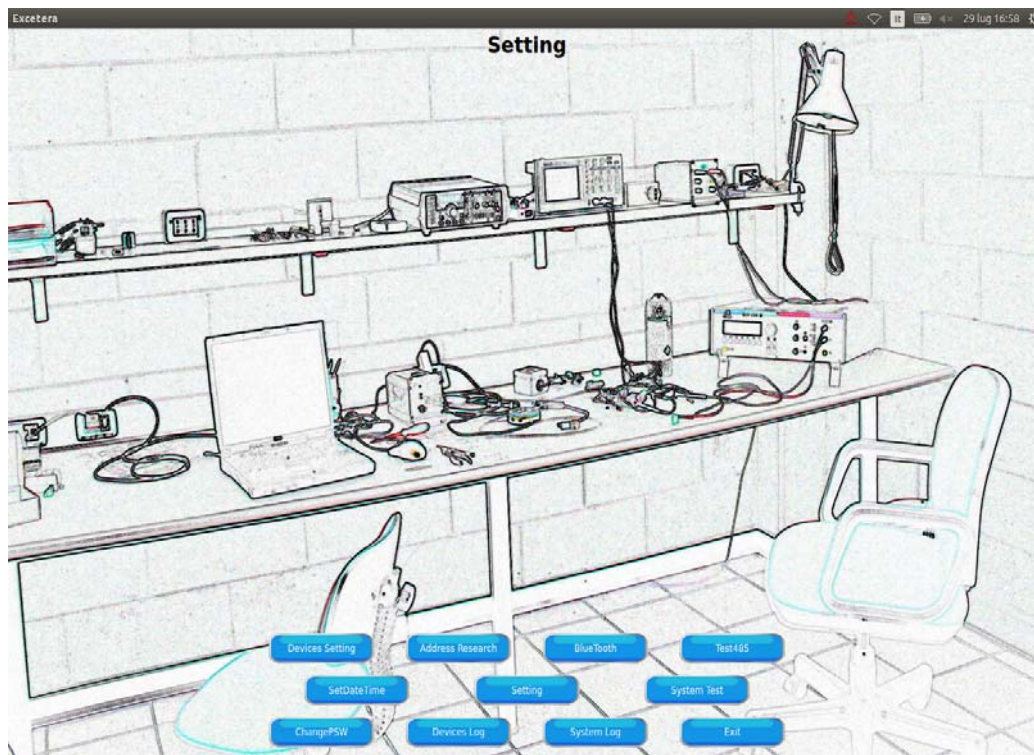
By double clicking on a particular device you will open the details page and you will find all the information previous described and you will be able to read the analogue input values, the outputs status, the set levels for alarm thresholds and all the other information about the device itself. Using the EXIT key you will go back to previous page.

6.2 Setting

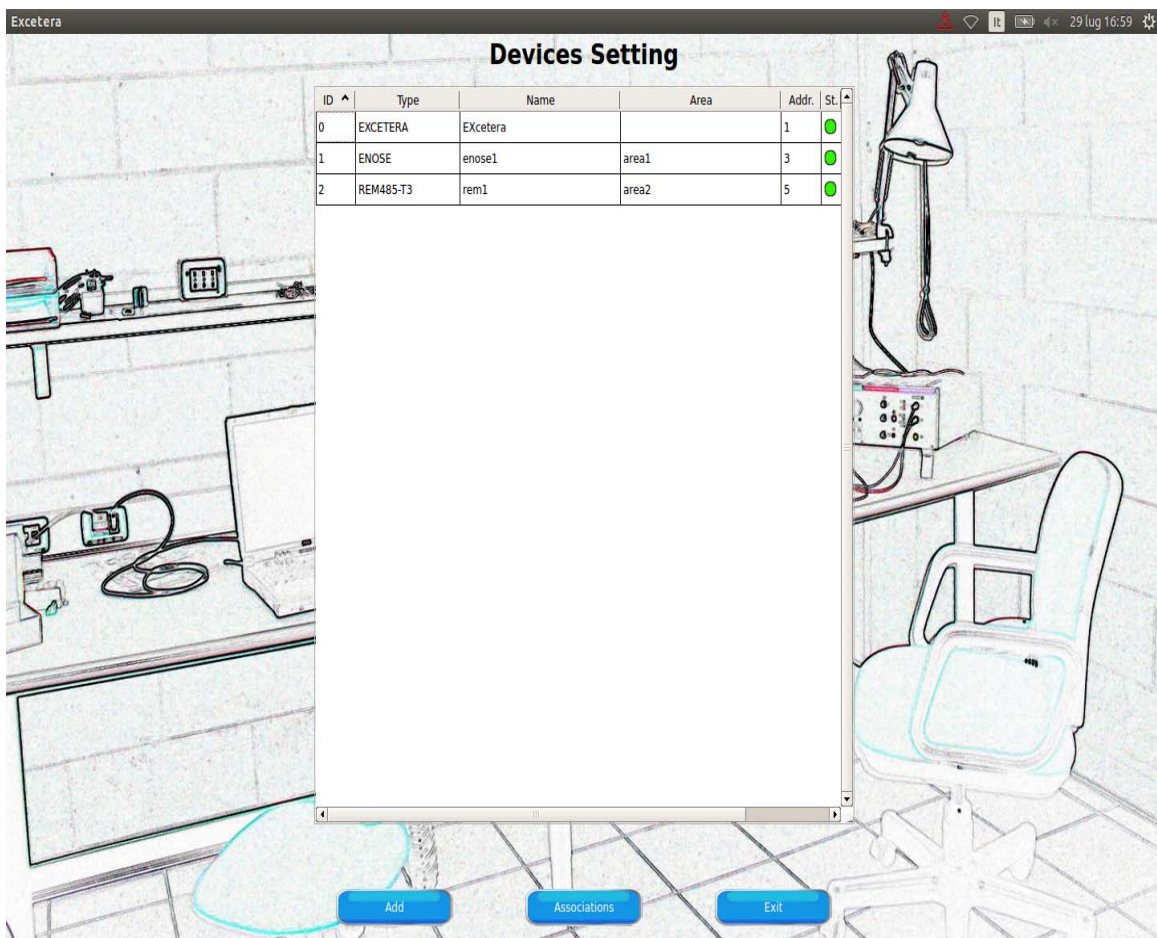
You can enter this menu only by a technical level password. There are five passwords AT users level:

*USER 1, 1111; USER 2, 2222; USER 3, 3333; USER 4, 4444; USER 5, 5555
And one password for technical level (default 6666).*

The users level's passwords allow to visualize the system general status, the UP-LOAD logs and of course the password change. The technical level password allows the access of the entire setting menu:



6.2.1 Devices Setting



By this menu it is possible to add a new device to the system or edit the settings of an existing one. It is also possible to create or edit the logic associations Status/Output.

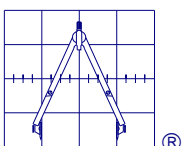
6.2.2 Add

Entering this key it will be displayed the window to select the different supported devices. Selecting by the mouse right key the device you want to add, the configuration window will be shown.

After completing the input of all the required parameter, entering the **Save** key the new device will be included otherwise entering the **Exit** key you can go back to the previous page without editing anything

6.2.3 Associations

The possible associations Status/Output can be generated directly using as a source an analogue input, an output equation or a general system status flag.



6.2.4 Source Output

On this page it is possible to see the defined associations or to create some new ones. Entering the **Add** key you will pop-up a configuration window with the parameters that will define the new association.

First of all, you have to define the device that to be linked to the association.

In the field **Device** in addition to the physical I/O devices are also available connections to the system functions:

equ = user's definable equations
sys = system global Flag

For the equations the list of the already defined ones will be visualized, while for the I/O devices you will be able to chose between all the defined ones

After selecting the device linked to the association, you must chose the **source** signal or Trigger that will activate the association itself.

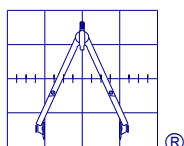
For all the I/O devices as well as for the system global Flag you have the following trigger possibilities:

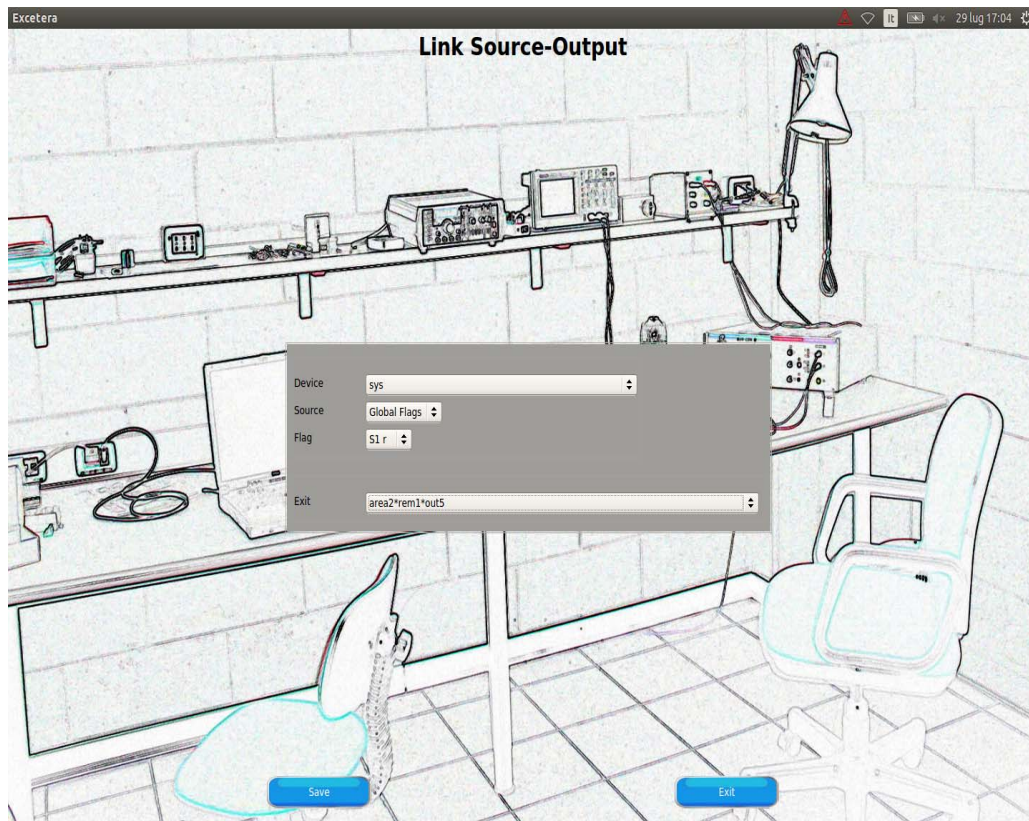
S1	Alarm exceeding threshold first level (*)
S2	Alarm exceeding threshold second level (*)
S3	Alarm exceeding threshold third level (*)
Ovr	Overrange
Flt	Fault
Com	Communication Fault

() These thresholds can be followed by a suffix (r) or (l) to indicate the alarm condition with auto - reset (reflex) or with manual reset (latch).*

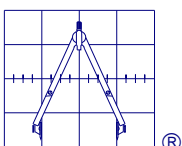
As a last setting you must chose the output that will be activated by the new association.

N.B. Obviously both the device and the output must have been previously defined.





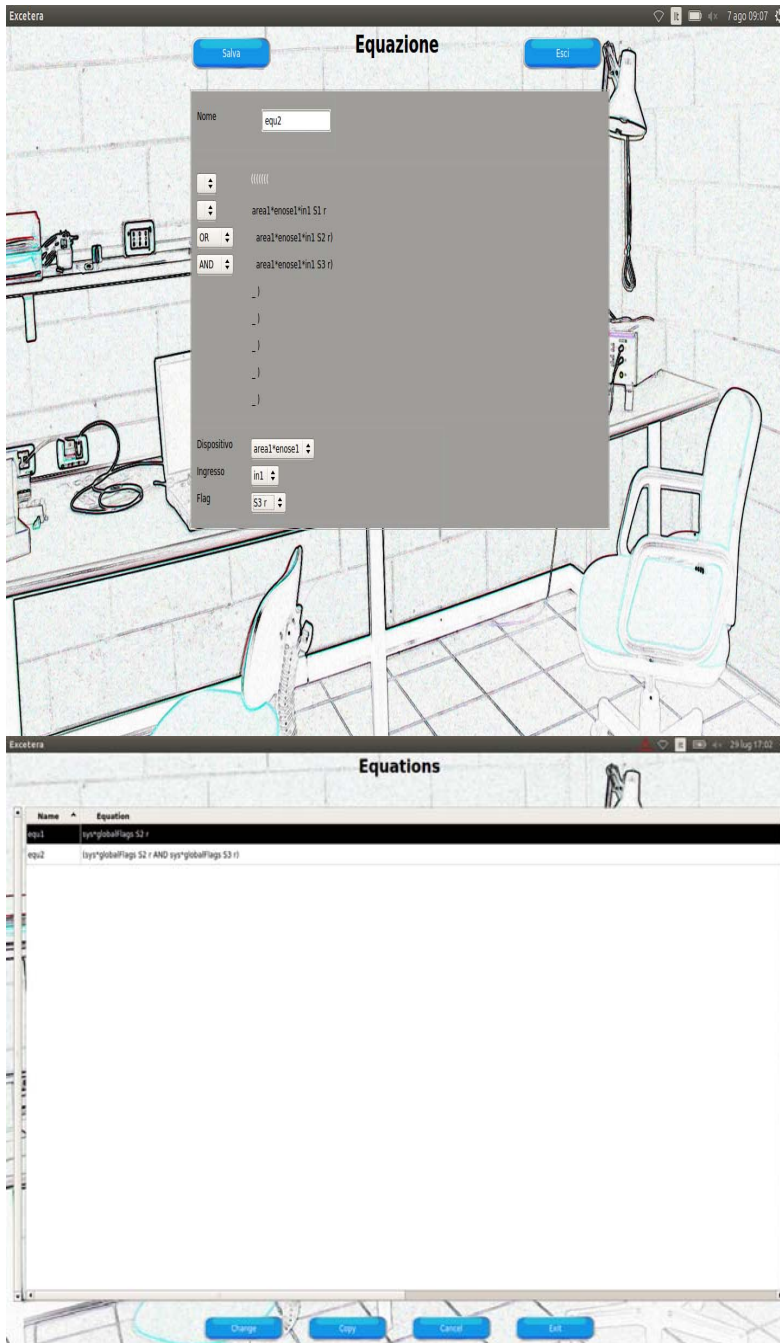
Enter the **Exit** key up to go back to the Device Setting page and click the **SAVE** key for enable the setting.



6.2.5 Equations

First of all, you have to define the name to assign to the equation in the field **Name**.
The terms of the equation can be:

Threshold levels of analogue inputs
System status flags
Other equations.



After having chosen the device, the input and the related threshold, touch the screen area corresponding to the first term available and the defined term will be placed.

In the same time will appear the list of the logical operators:

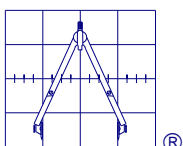
!, OR, AND, XOR, OR!, AND!, XOR!.

It is possible to define up to eight terms for each equation, for more complex functions it is possible to link more equations together.

To cancel a term in an equation you just have to select the white space in the operators field and then select the term you want to cancel.

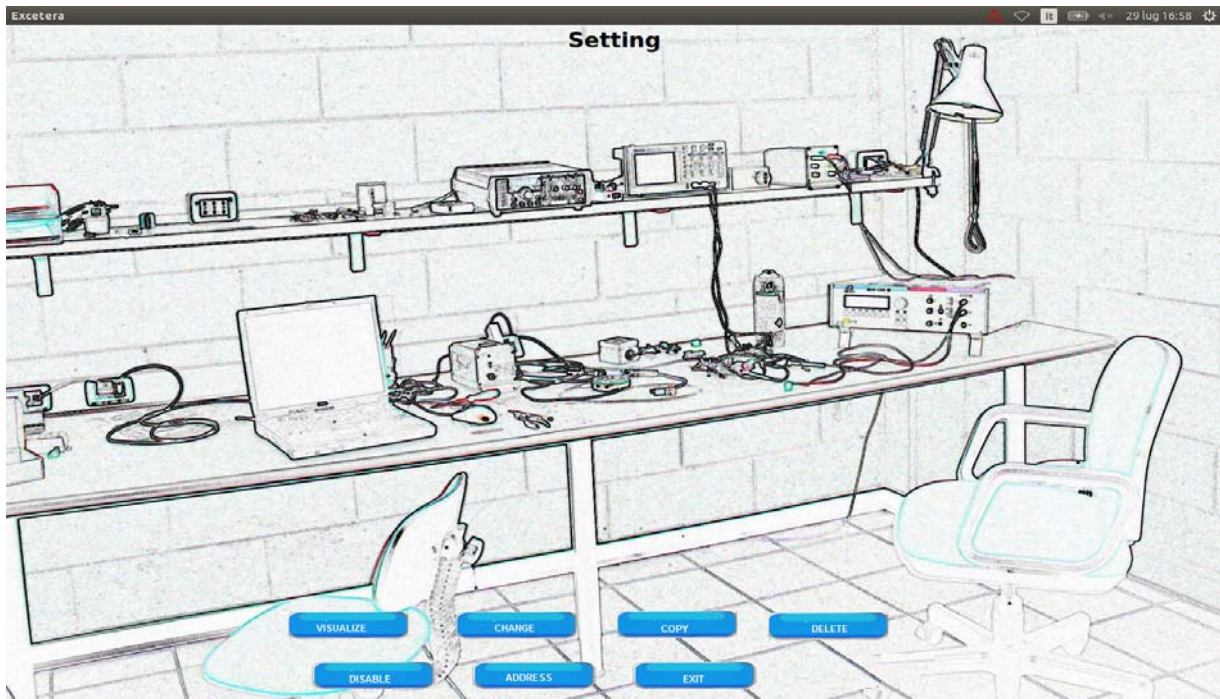
Also for the equations the copy function is available which facilitate the compilation of similar equations making the setting faster.

The already defined equations are visualized in the main page EQUATIONS, from this page it is possible to select them in order to modify them using the command **Change** or eliminate them using the command **Delete**.



6.3 Devices setting

From the page **Devices setting** selecting by a double click a device already defined you will visualize the following menu:



6.3.1 Visualize

This command allows the visualization of the device status and of all its setting parameters.

6.3.2 Disable / Enable

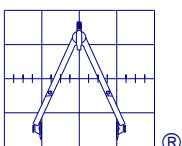
With this command it is possible to exclude a device from a serial loop interrogation cycle. To do this it is enough to select the device to be excluded and click the *Disable* key. This is a definitive action, so to insert again the device in the interrogation cycle you have to repeat the procedure and click the *Enable* key.



WARNING: All active events related to the excluded device are frozen.

6.3.3 Change

The setting parameters can be modified using the command *Change*. Attention: to change the setting parameters the device must be disabled before.



6.3.4 Copy

The Copy command can be very useful if you have to add more devices of the same kind. Using this command the user will be able to insert new devices just updating the name and the new address.

6.3.5 Delete

Use this command to permanently erase the device from the list.



WARNING:

All active events related to the excluded device must be erased before.

6.3.6 Address

This command allows the address change of the selected device.

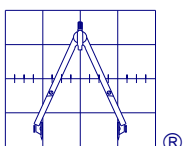
WARNING: the addresses 001 and 002 are system reserved addresses and therefore not available. As already described it is possible to connect on the serial line up to 253 devices.



NOTE: All Oggioni devices are supplied with the default address 127, so before connecting them to the network they have to be configured with their own single definitive addresses.

It is recommended not to confuse the detectors device ID. number (Data base location) and the Addr. number (Device Modbus address).

The first one is just a progressive number to identify the device location in the Excetera data base, while the second is the "unique identifier" that the central unit uses to communicate via Modbus with the devices.



7. SYSTEM UTILITY

7.1 Address research

This function is particularly useful to perform a research of the addresses of all the devices connected to the serial Loops.

During the research the system also provides information about the communication speed and the number of possible lost data for communication faults.

7.2 485 Test

This command allows an immediate glance on the status of all the connected devices.

Every device is represented by a led:

(Green = normal; Yellow = Fault; Red = Alarm; Grey = Communication Fault; White = Disabled)
Clicking on the led you will visualize the name and ID of the device.

This page, unlike the most general visualization one, shows the devices status in real time without elaborations or delays and at the maximum communication speed.

7.3 Set Data/Time

Command to set the system date and time

7.4 BlueTooth

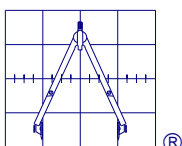
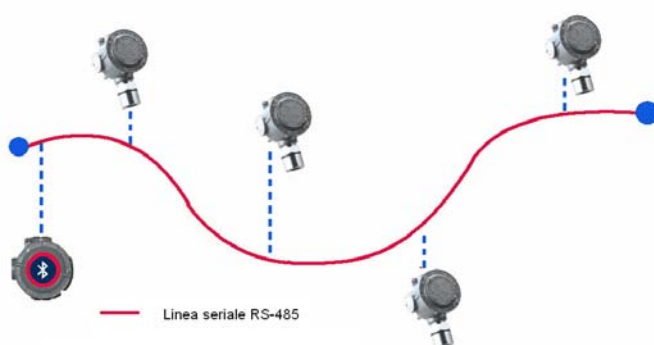
By this command the EXcetera central unit suspends the communication on the serial Loops, for a limited time, allowing the communication with a possible external master device.



This option can be particularly useful for the diagnostic operations during the system installation or maintenance phases. Particularly using a BT-485 Bluetooth Modem connected to a serial loop, the communication will happen simply using a laptop computer or Tablet.

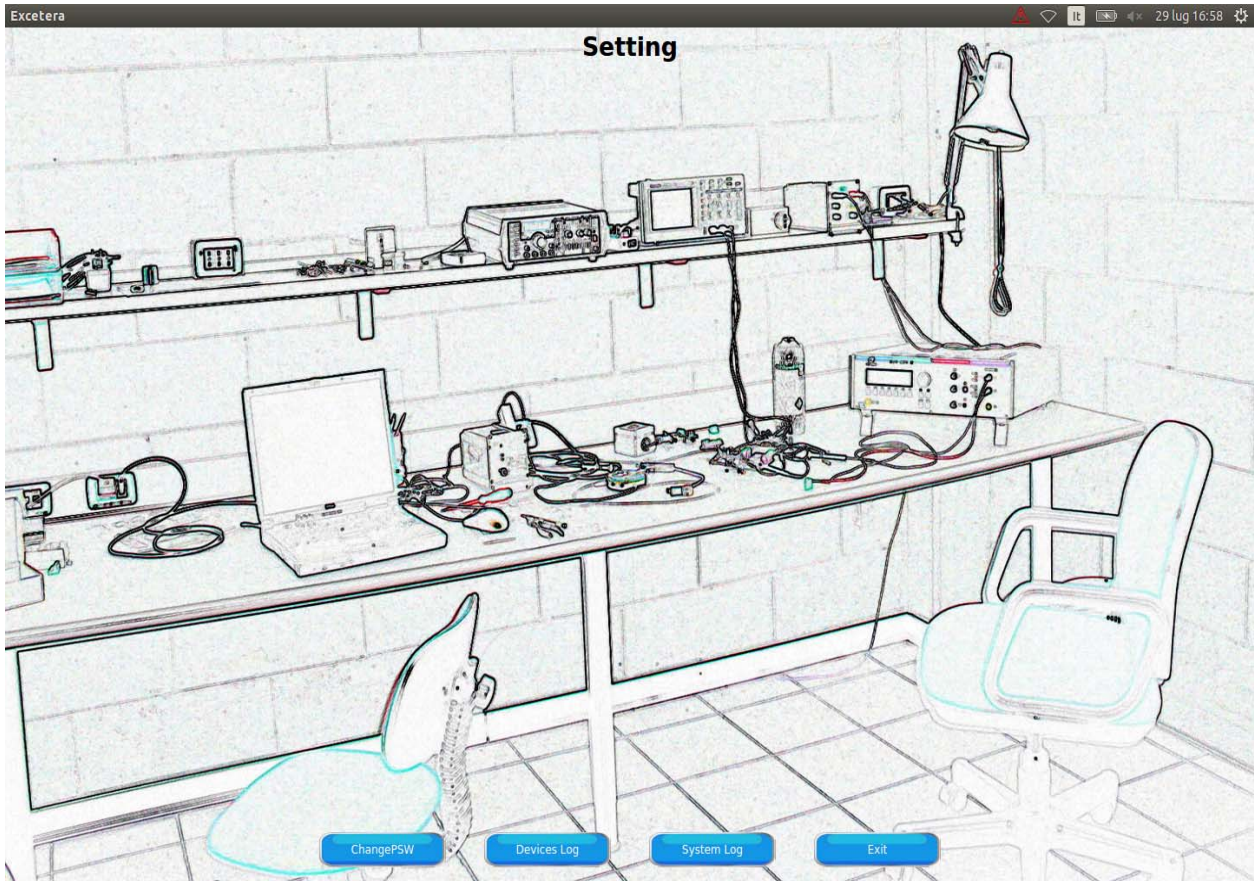
These option can be particularly useful for oggioni Gas Detectors enose® because it allows the display of all the functional parameters related to the sensor status, maintenance or make the calibration procedures

For further information please refer to the document operator manual BT-485 Part No 101200



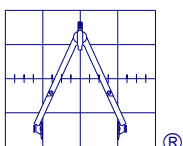
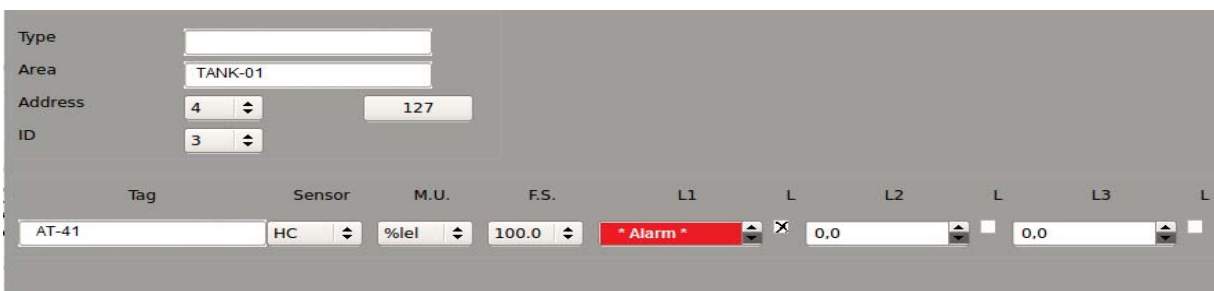
8. USER MENU

The user menu allows to see the the devices status and the system Logs.
 The available Logs are System and Device, in the first one all the events related to the system are recorded, in the second one those related to the devices.



8.1 Events Acknowledgement

When the system is operating in normal condition the display shows the logo, time and date.
 If an event occurs, the Excetera pop-up automatically the page of visualization of the devices.
 When the event is associated to an alarm threshold, as already described, it can have two possible conditions auto -reset (reflex) or with manual reset (latch).
 To reset a latch status the user must select the device in alarm and click on the alarm threshold.



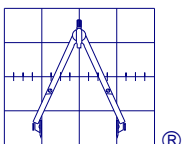
Excetera

29 lug 17:27

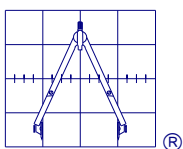
System Log

Date/Time	Event	Area*Name	Source	Note
29 July 2015 17:23:09	uscita programmazione			
29 July 2015 17:17:19	termine test 485			
29 July 2015 17:16:55	inizio test 485			
29 July 2015 17:16:47	uscita programmazione			
29 July 2015 17:08:27	inizio test 485			
29 July 2015 17:08:25	termine bluetooth			
29 July 2015 17:07:56	inizio bluetooth			
29 July 2015 17:07:28	ricerca indirizzi			
29 July 2015 16:58:49	uscita programmazione			
29 July 2015 16:58:40	uscita programmazione			
29 July 2015 16:58:15	programmazione utente 2			
29 July 2015 16:55:53	uscita programmazione			
29 July 2015 16:55:26	uscita programmazione			
29 July 2015 16:34:31	uscita programmazione			
29 July 2015 16:34:22	uscita programmazione			
29 July 2015 15:26:54	uscita programmazione			
29 July 2015 15:26:46	modificato	area1*enose1		
29 July 2015 15:24:56	uscita programmazione			
29 July 2015 15:24:50	modificato	area1*enose1		
29 July 2015 15:08:33	uscita programmazione			
29 July 2015 15:08:27	modificato	area1*enose1		
29 July 2015 14:30:39	tacitazione allarme 1	area1*enose1	in1	
29 July 2015 14:30:07	uscita programmazione			
29 July 2015 14:29:07	uscita programmazione			

The Logs can be exported in XLS format, using the *Export* key or deleted by the *Cancel* key.



NOTES



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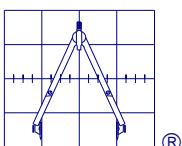
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The brochure includes general specifications which are subject to change without prior notice.



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