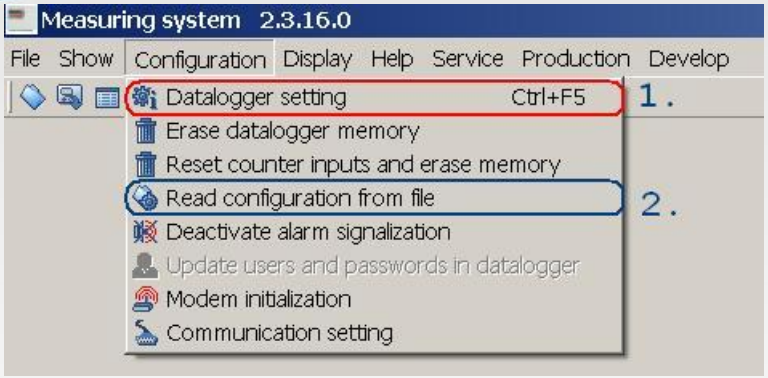
Monitoring systems COMET types MS55 & MS6

MS55/MS6 Configuration

Monitoring Systems COMET types MS55 & MS6



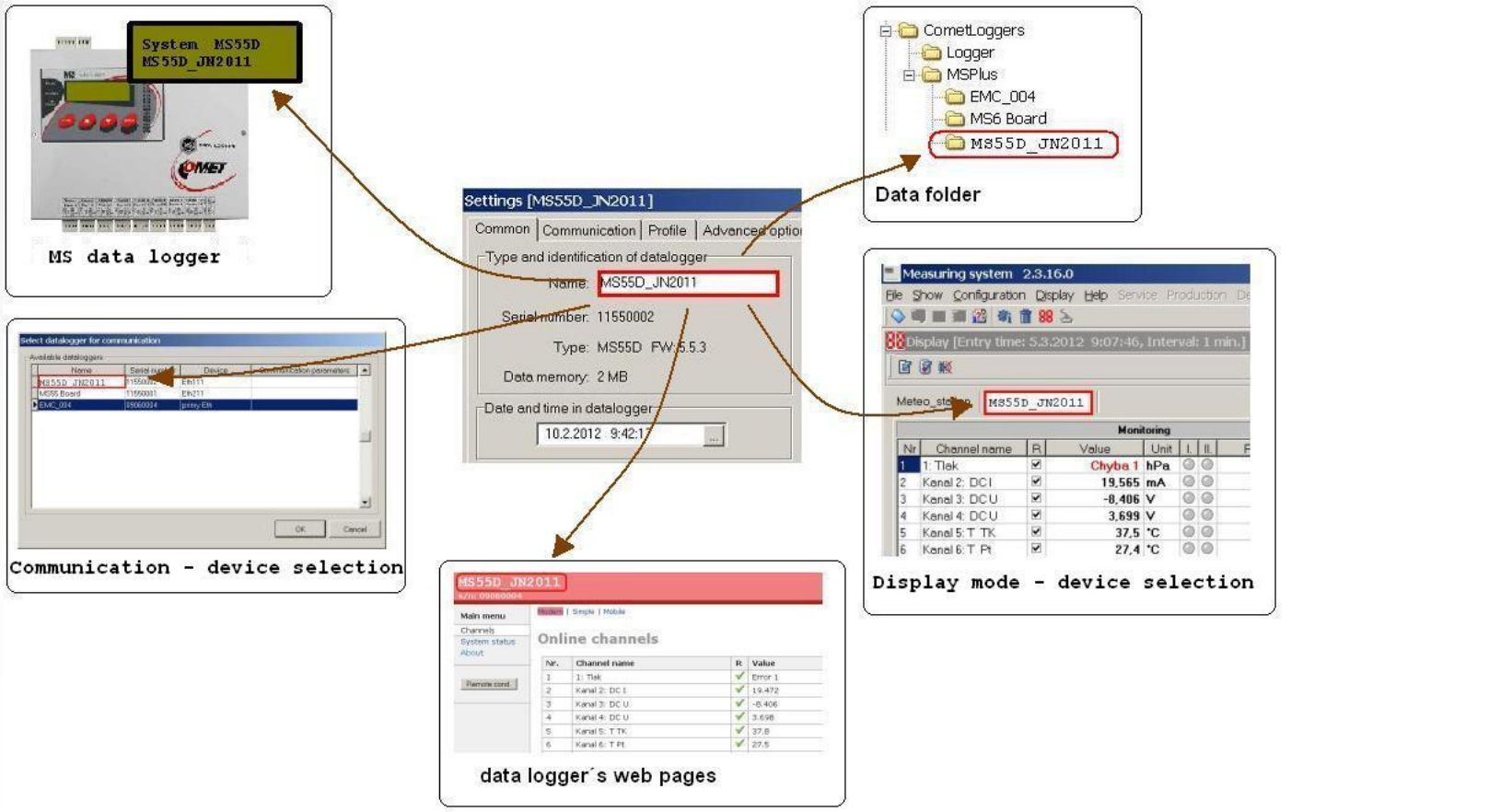
MS settings can be made:

- Using software for MS COMET.
- Direct communication with MS (1.).
- Non-Direct – editing file in PC and its later saving to MS(2.).

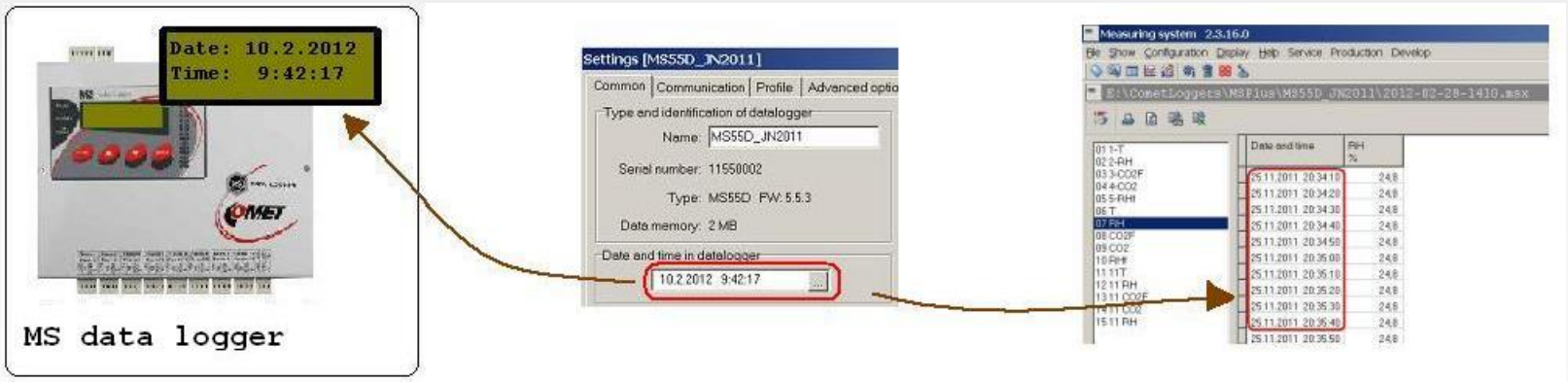
Each downloaded file with record contains a complete MS configuration, which can be edited, saved on hard-disc and when needed return back to MS.

Monitoring Systems COMET types MS55 & MS6

1. MS name (required) :



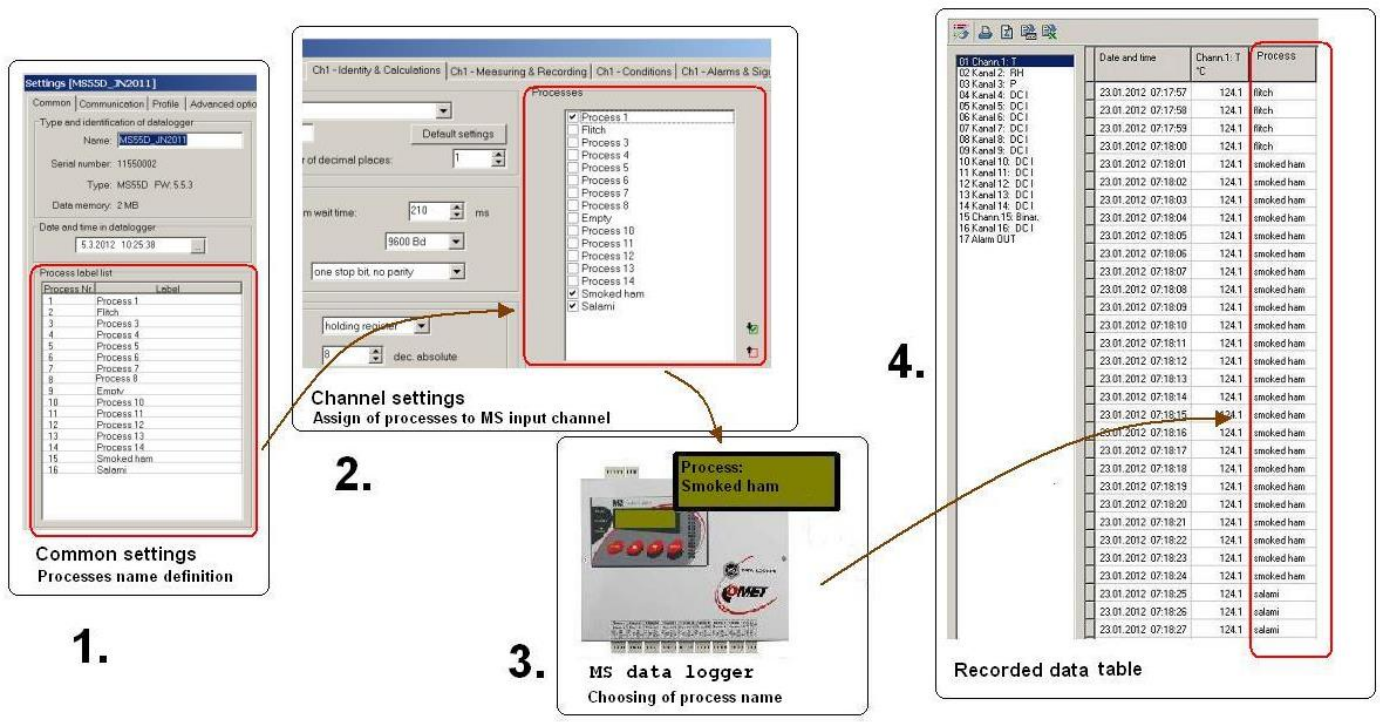
2. MS Time&Date settings (required):



- This setting affects all MS timing.
- It is necessary to delete whole record after changing MS date and time.
- Seasonal time change is not support.

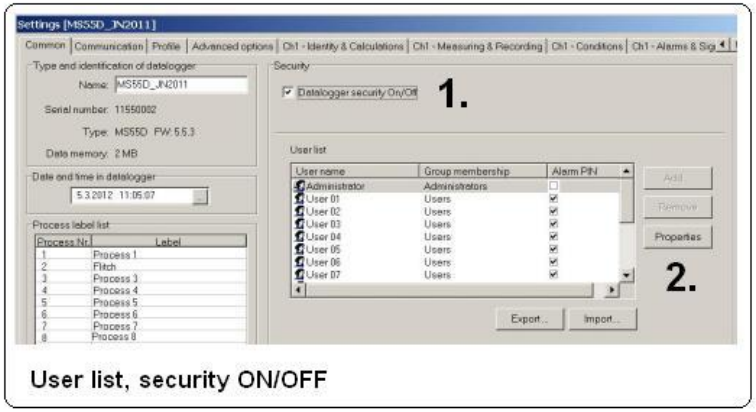
Monitoring Systems COMET types MS55 & MS6

3. Process Setting (use if required):

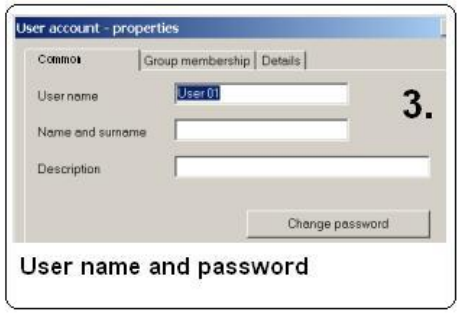


Processes allows to mark part of record with additional text. They are used to surbscribe parts of ongoing process with default text when the user needs.

4. MS Security Settings (use if required):



User list, security ON/OFF

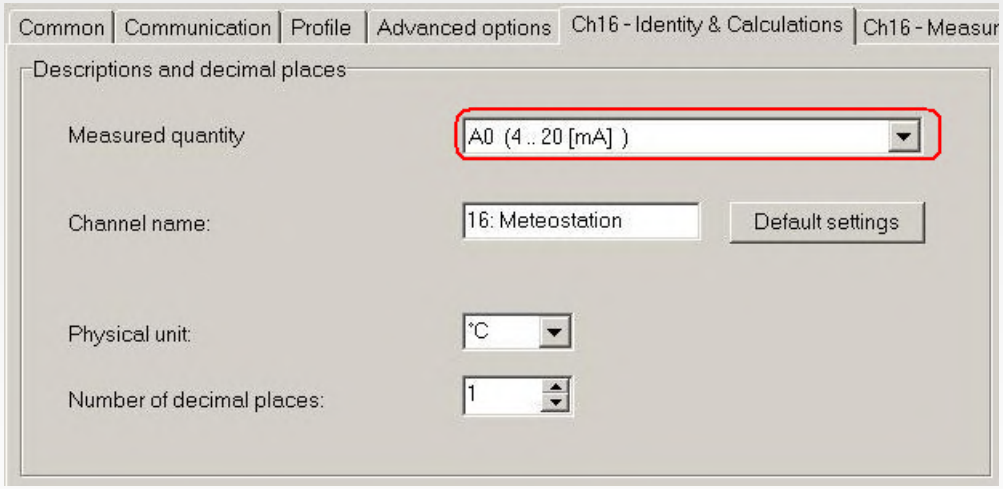


User name and password

User rights definition

After turning on the security, the username and password will be required at the beginning of communication. For alarm deactivation could be used unique PIN code for each user. In record is possible to recognize which user was deactivating the alarm. Login information can be stored in PC optionally.
Software adjusting is doing in menu File – Options – Users and passwords. All changes from keyboard is possible to protect by PIN2 code (unrelated to user).

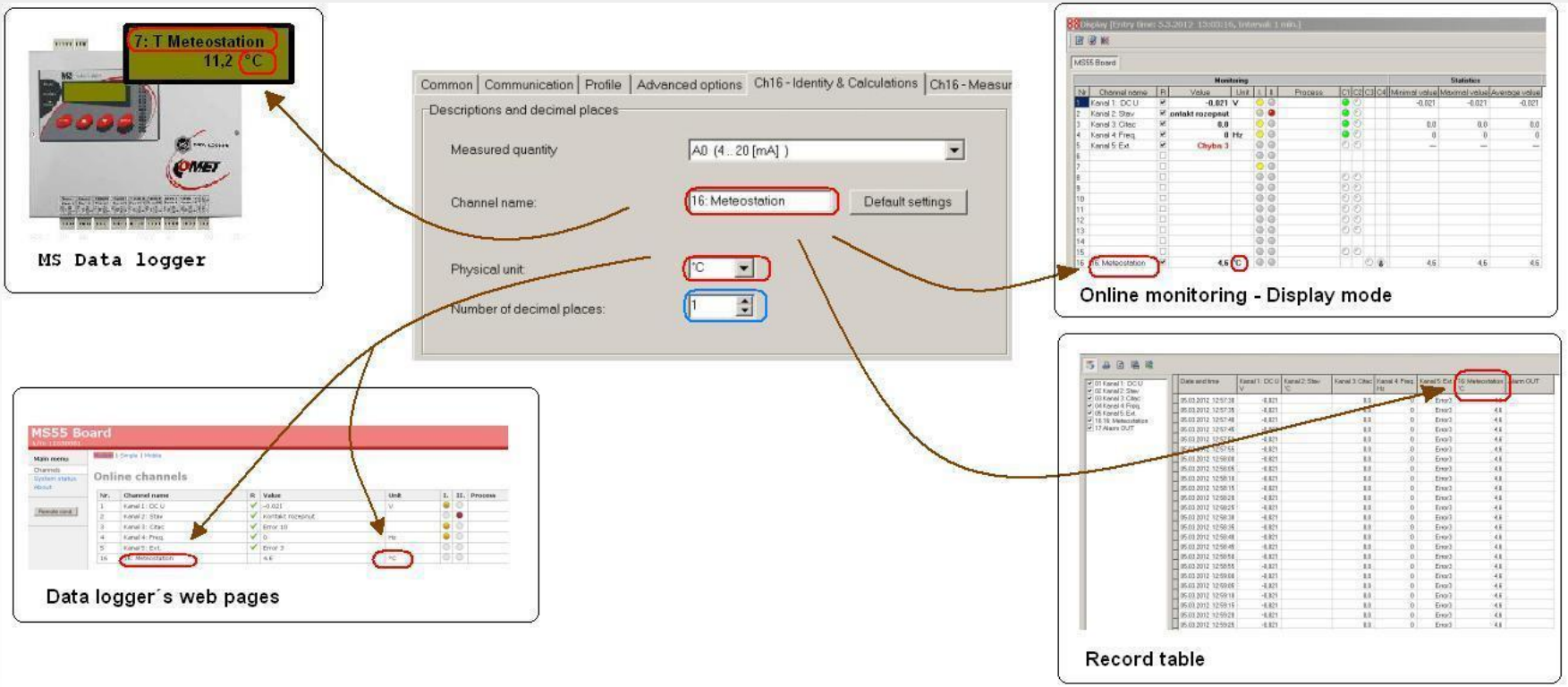
5. Measured input value (required settings):



Select measured value according to connected hardware. MS55 type is limited only to fitted input modules.
For some inputs types (eg. Counters, RS485 input etc.) are available any other settings. Detailed description you can find in manual.

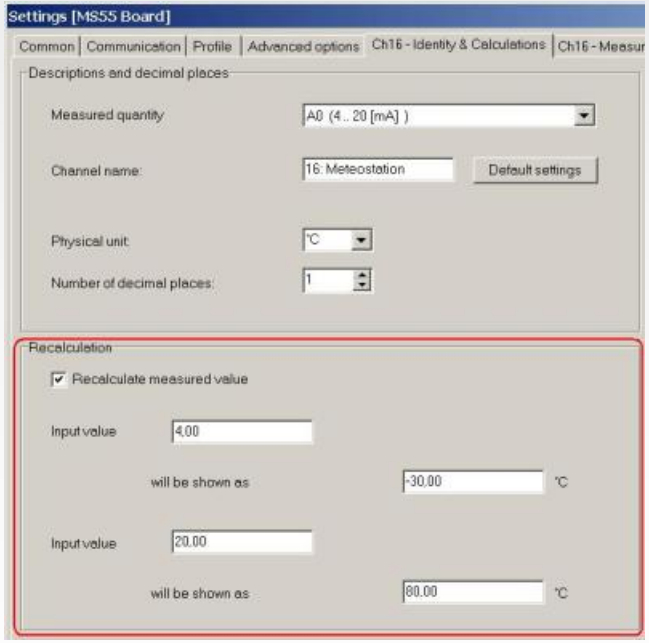
Monitoring Systems COMET types MS55 & MS6

6. Input identification (required settings):



Choose the name of input channel and assign physical unit and number of decimals.

7. Conversions – user calibration (use if needed):



Using two-point user calibration may be done conversion of measured value to expected output value. Setting parameters is depended to parameters of connected sensor.

8. Measuring and record (required settings):

For acquisition and process of measured values on specific channel it is necessary to enable its measurement.
It is necessary to enable suitable record type for recording of measured values:

- Continuous recording with a constant interval – measured values are stored into a MS memory with this interval.
- Conditional record with continuous interval – record runs only if selected condition which can be deduced from exceeded of measured values on this channel, on other channel, time or is manually set by user is performed.
- Sample record – only the measured value and time of condition change is recorded

Time limit of record process (global, daily) can be set for all record types. Conditions and its combinations are set similarly as in alarms.

8.1. Examples of record :

Date and time	Channel 1: T[°C]
1.1.2009 08:00:00	23,8
1.1.2009 08:30:00	24,5
1.1.2009 09:00:00	26,8
1.1.2009 09:30:00	33,2
1.1.2009 10:00:00	37,5
1.1.2009 10:30:00	42,3
1.1.2009 11:00:00	45,1
1.1.2009 11:30:00	45,2
1.1.2009 12:00:00	44,1
1.1.2009 12:30:00	40,1
1.1.2009 13:00:00	35,2
1.1.2009 13:30:00	30,1

Continuous record

Date and time	Channel 10: T[°C]
1.1.2009 10:55:00	40,1
1.1.2009 11:00:00	41,3
1.1.2009 11:05:00	40,2
1.1.2009 11:30:00	40,3
1.1.2009 11:35:00	42,5
1.1.2009 11:40:00	40,1

Conditional record

Date and time	Channel 1: T[°C]
1.1.2009 08:01:11	23,8
1.1.2009 08:40:23	24,5
1.1.2009 09:05:07	26,8
1.1.2009 09:12:44	33,2
1.1.2009 10:08:09	37,5
1.1.2009 10:32:48	42,3

Sampled record

Date and time	Channel 1: T[°C]	
1.1.2009 08:00:00	23,8	continuous
1.1.2009 08:30:00	24,5	continuous
1.1.2009 09:00:00	26,8	continuous
1.1.2009 09:30:00	33,2	continuous
1.1.2009 10:00:00	37,5	continuous
1.1.2009 10:30:00	39,3	continuous
1.1.2009 10:55:00	40,1	conditional
1.1.2009 11:00:00	41,3	continuous +conditional
1.1.2009 11:05:00	40,2	conditional
1.1.2009 11:30:00	40,3	continuous +conditional
1.1.2009 11:35:00	42,5	conditional
1.1.2009 11:40:00	40,1	conditional
1.1.2009 12:00:00	34,1	continuous
1.1.2009 12:30:00	30,1	continuous
1.1.2009 13:00:00	25,2	continuous
1.1.2009 13:30:00	20,1	continuous

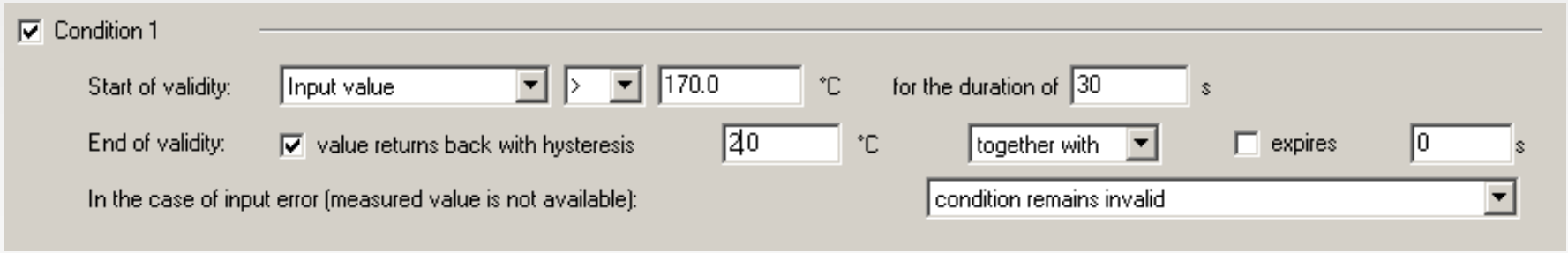
Continuous + sampled record combination

Different types of record can be operated simoultaneously and this can be used eg. for detailed mapping of conditions where the measured values exceed the specified limits.

9. Conditions:

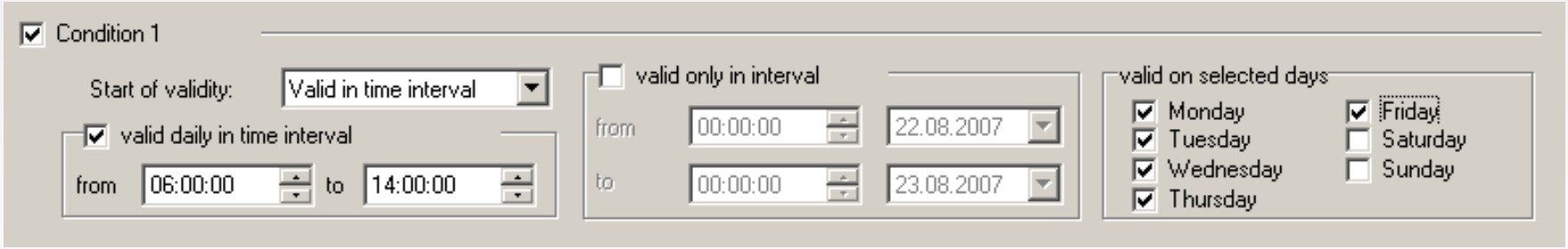
- Conditions must be set if we use the alarm or if we need to change record only under certain circumstances.
- Conditions must be set, if we use alarms or if we need record only under certain conditions.
- Its a conditions derived either from measured values, from time or are set remotable by user (from PC or via SMS)
- The condition can take one of two states (valid / invalid).
- Using conditions alarms are evaluated and record is activated.
- Up to 4 different conditions can be defined on each channel.

9.1. Example conditions derived from the measured values:



- The condition is valid, if input value exceeds 170°C and this state persist at least 30 seconds. Condition expire immediately if the temperature drops below 168°C.
- Termination of condition may be depended on time, on measured value or on its combination
- In case, that error value will be measured, is possible to choose from several options how to respond state conditions.
- Detailed description including graphs you can find in the manual.

9.2. Example of condition derived from the time:

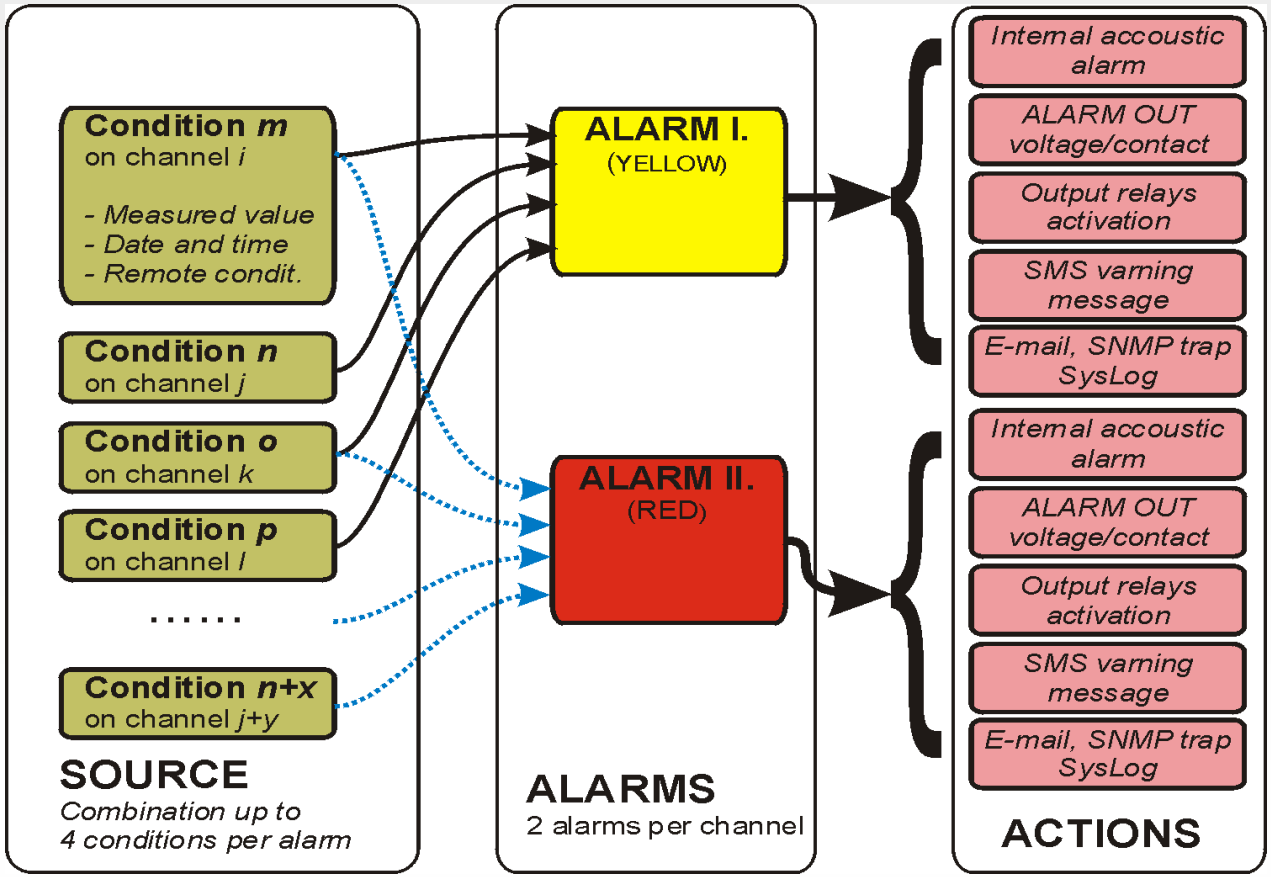


- The condition is valid, if the current date and time fulfill selected criteria.
- Termination of condition occurs immediately, if these criteria are not longer valid.

9.3. Examples of conditions, set by user:

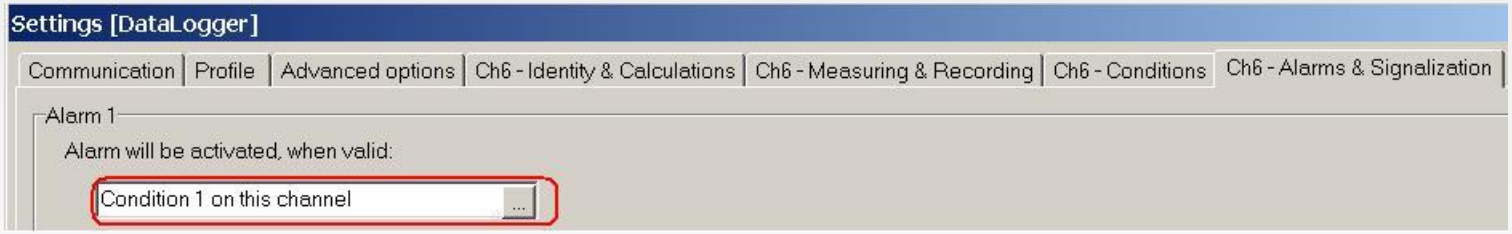
- Condition can be set in a running mode Display
- It is necessary to set users PIN, if users and password administration is enabled.
- Condition can be controlled using SMS messages in case of setting this condition and connecting to GSM modem. Users PIN code is necessary to set.

10. Alarm creation on input channels:

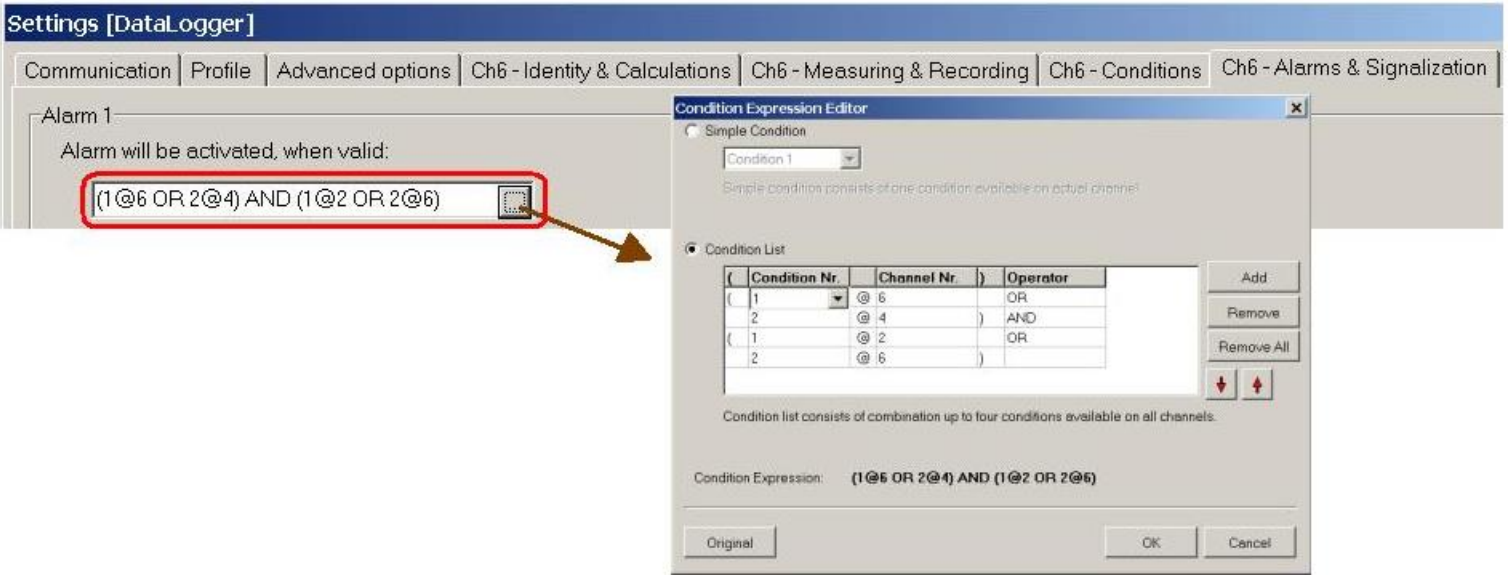


10.1. Examples of assignment alarms conditions:

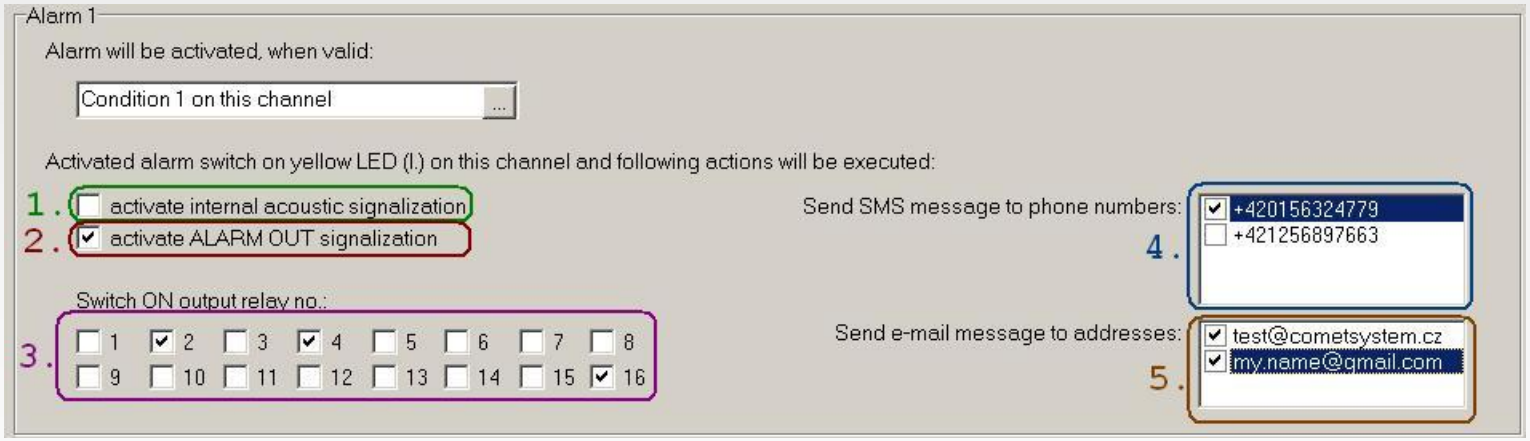
- Assignment of 1 condition



- Assignment of combinated conditions

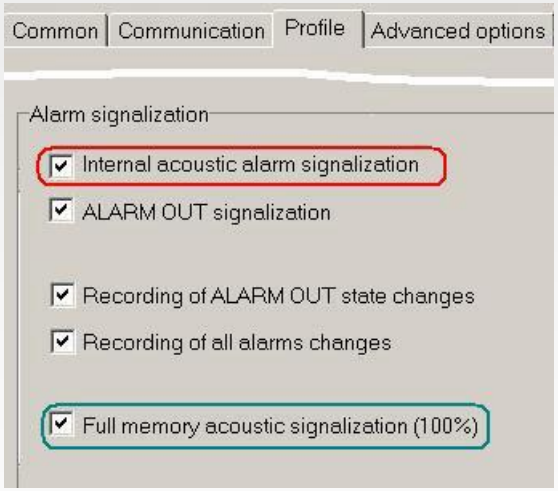


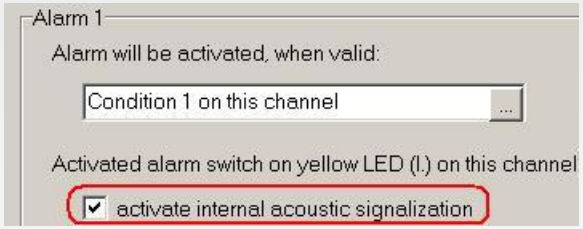
10.2. Actions in case of alarm:



1. Possibility of activation an internal signaling.
2. Possibility of activation ALARM OUT output.
3. Possibility to swith selected relays on added relay output.
4. Possibility to send warning SMS via connected GSM modem.
5. Possibility to send warning email via Ethernet interface.

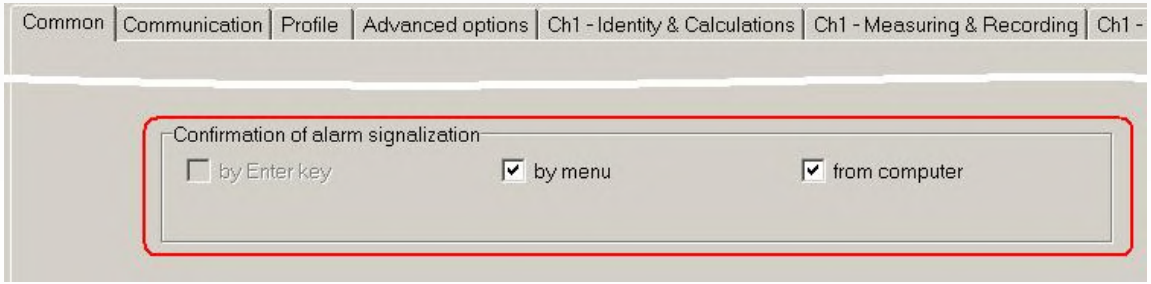
10.3. Internal acoustic signalization:





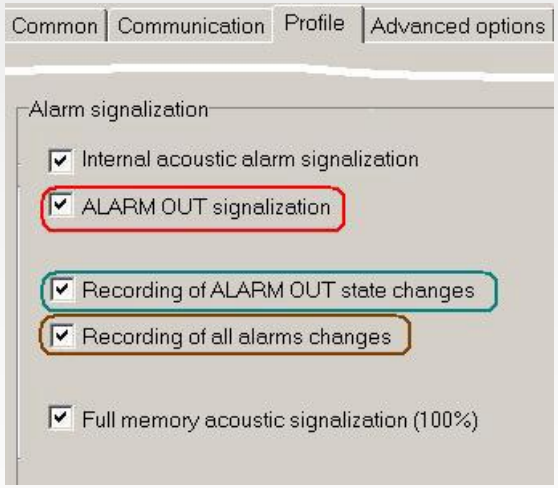
- Each alarm turn-on

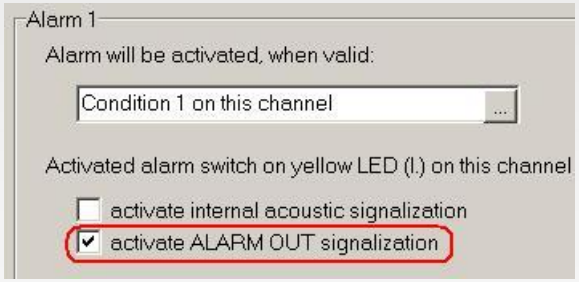
- Global turn-on using bookmark Profile, possibiity of full memory signalization



- ALARM OUT output and its acoustic alarm can be deactivated by operator.

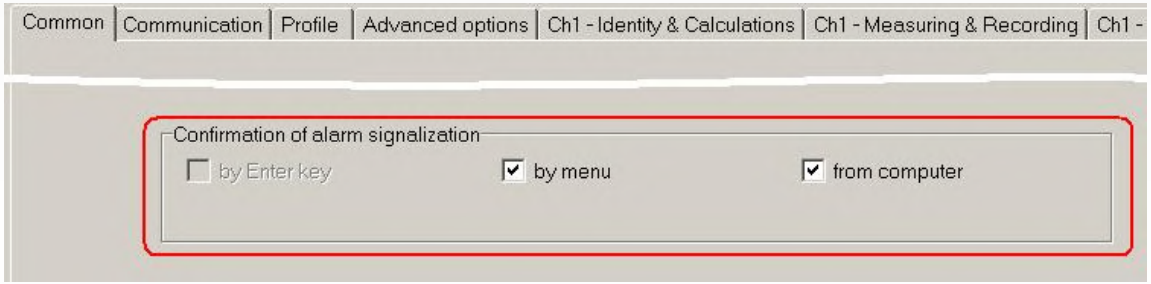
10.4. ALARM OUT output:





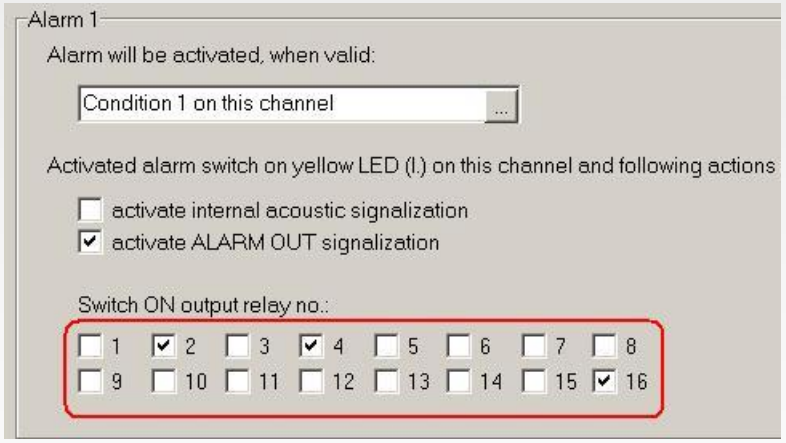
- Each alarm turn-on

- Global turn-on using bookmark Profile, possibility of alarm record



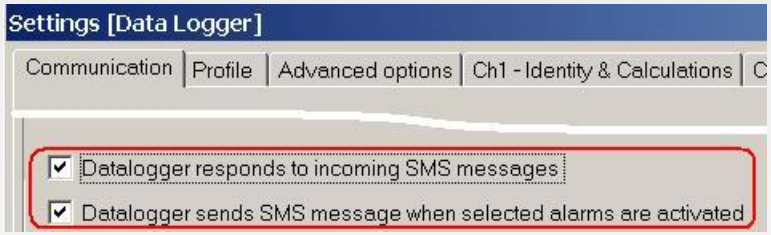
- ALARM OUT output and its acoustic alarm can be deactivated by operator. ALARM OUT may act inversely - the settings on bookmark Advanced

10.5. Output relays module:

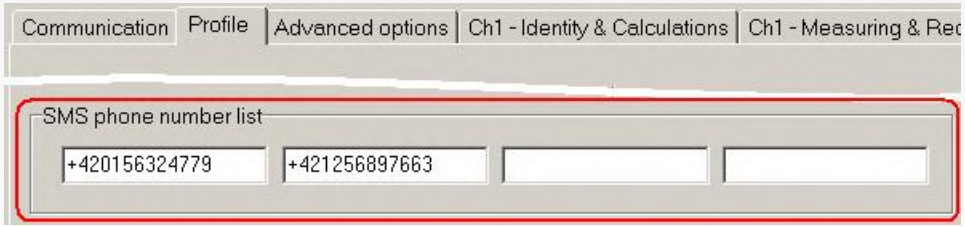


- Any of 16 output relays can be switched in case of alarm.
- Each relay can be controlled by any number of alarms.
- Relay are active when alarm persits. It can be dectivated only using remote alarm condition, not by the operator.

10.6. Warning SMS messages:



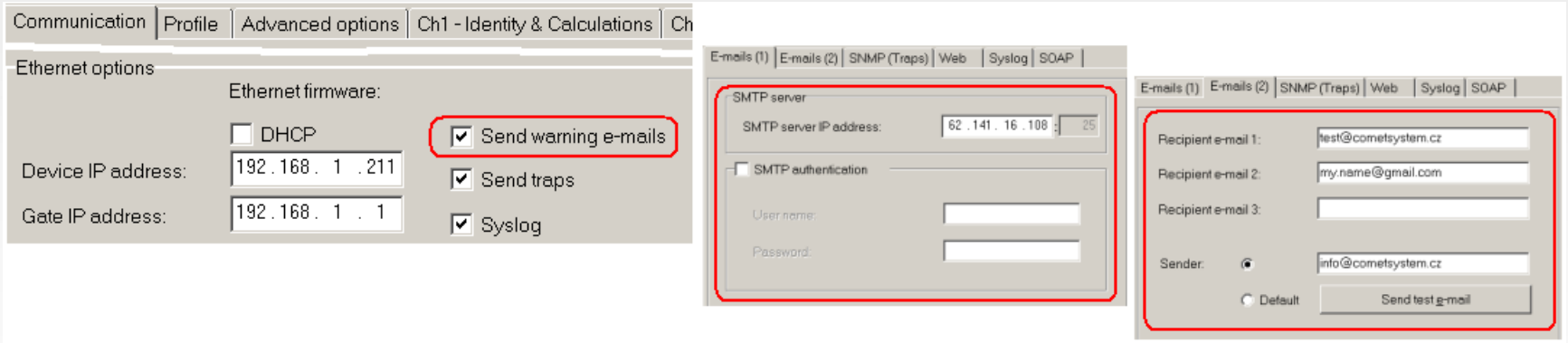
1. It is necessary to allow SMS on Communication bookmark. GSM modem must be connected to MS.



2. It is necessary to define phone numbers of dialed participants.

3. It is necessary to define phone numbers of dialed participants on Alarms bookmark.

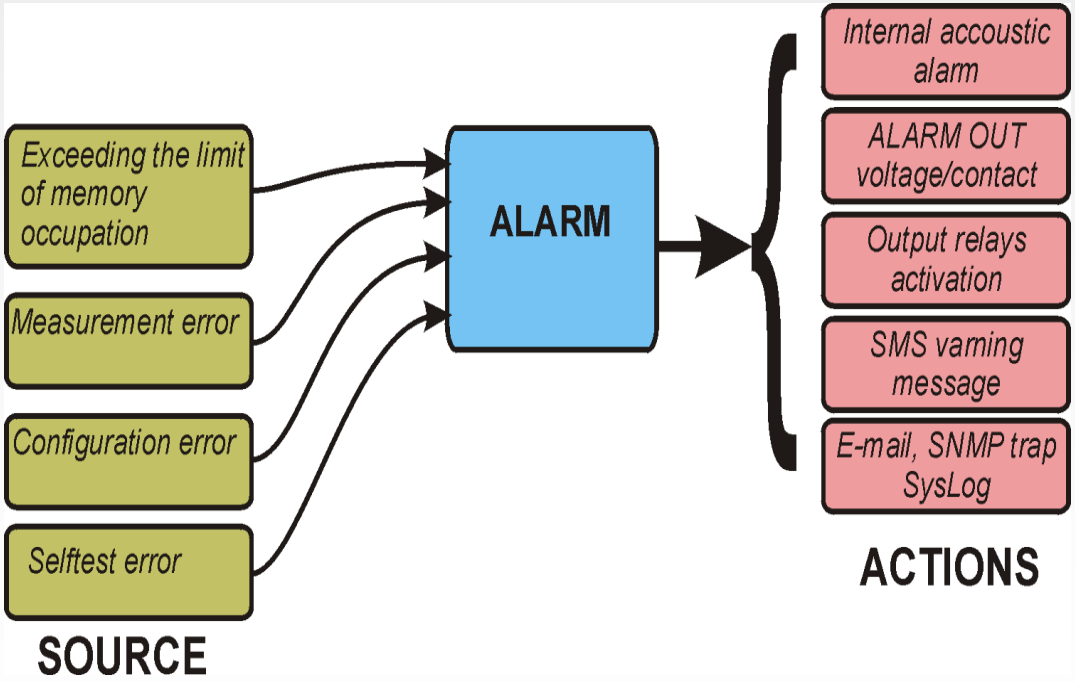
10.7. Warning e-mails:



1. It is necessary to allow emails and define another configuration on Communication bookmark.

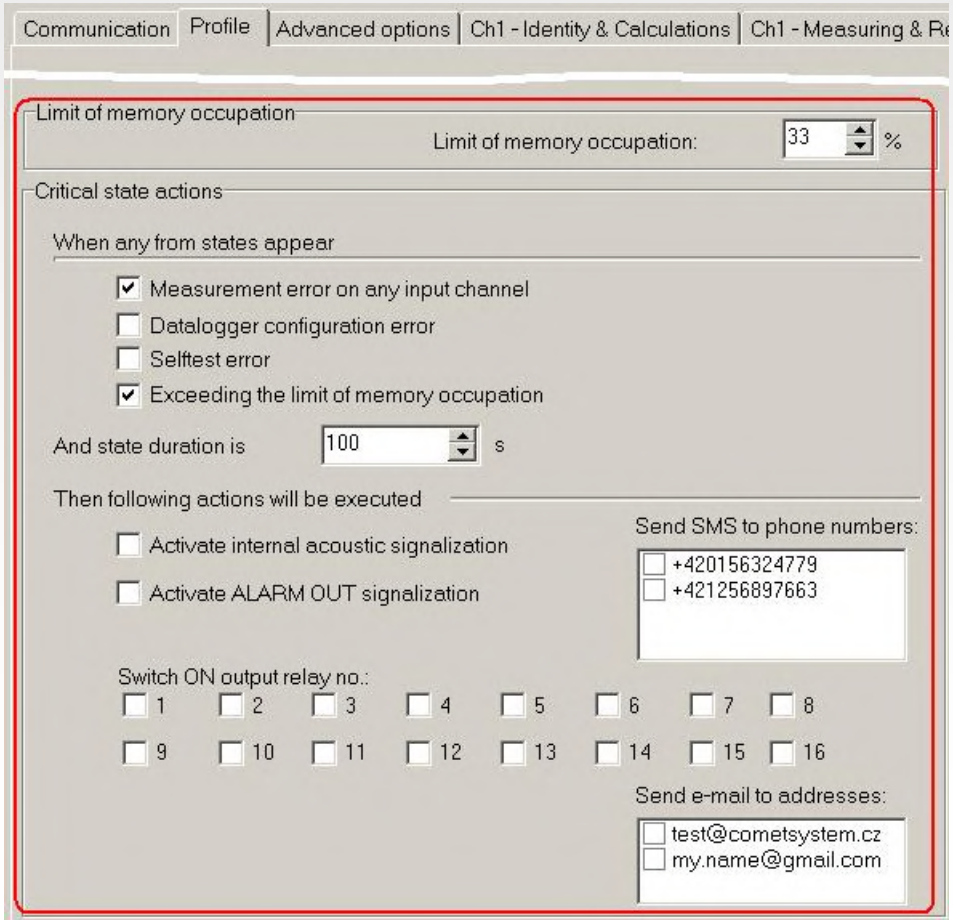
2. It is necessary to choose message recipient on Alarms bookmark.

11. Another alarm options:



Configuration is done on global bookmark Profile. Alarms can also arised due to exceeding the limit of full memory, measurement error, MS configuration and selftest.

11.1. Another alarm options:



12. Example for configuration of Ethernet Interface