User Manual Now_SMS

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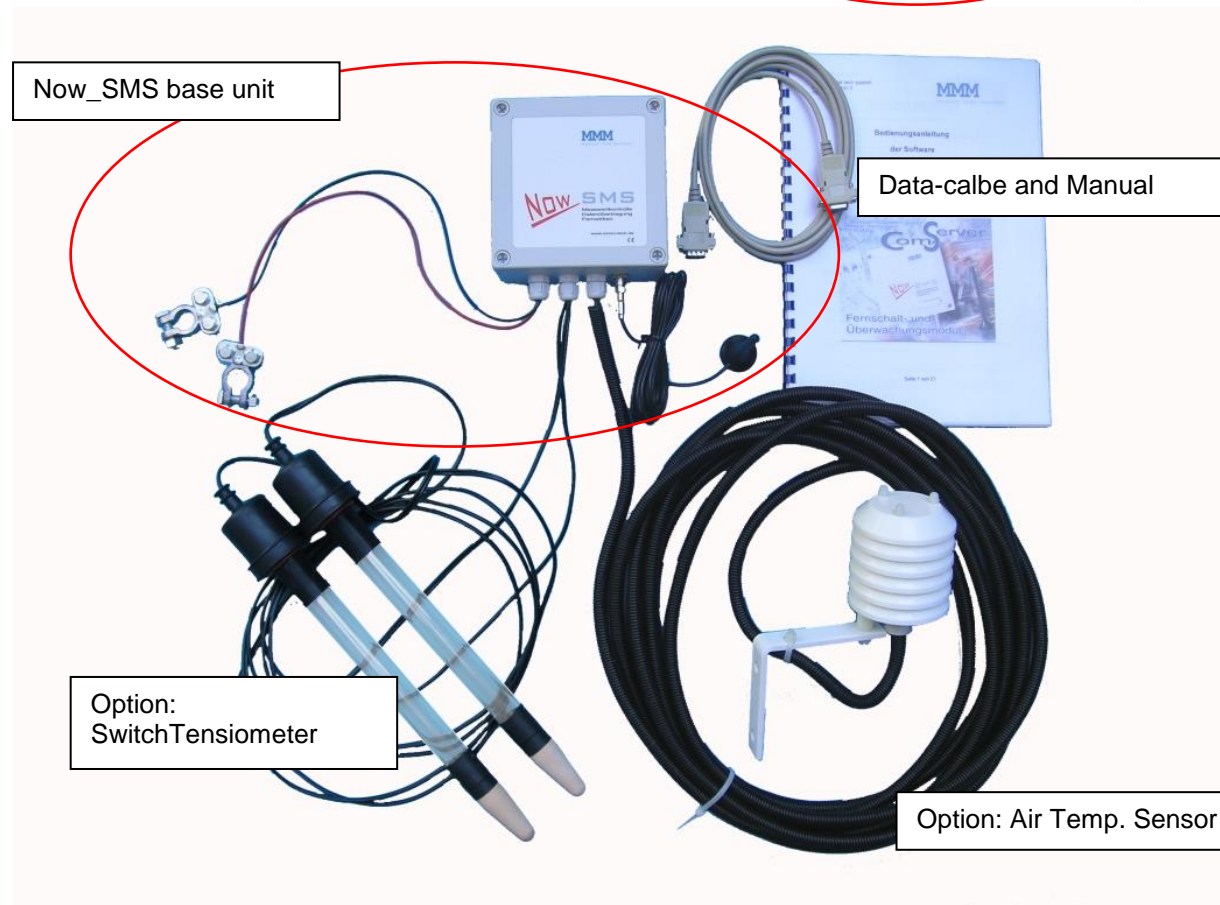**Content**

The Now_SMS Instrument

Included in delivery

Now_SMS base unit, Sensors as per order, Software CD, serial Data-cable, Manual

The base unit

The **Now_SMS base unit** includes:

- Box with Electronic and Modem (IP 67)

- Power cable with connectors for Car battery

- GSM Antenna, 3m Cable

Now_SMS base unit

Data-calbe and Manual

Option:
SwitchTensiometer

Option: Air Temp. Sensor

Abilities of the Now_SMS

The Now_SMS System works parallel in three Modes:

Alert-Mode

The user has the possibility to set alert-thresholds (example: Temperatures). When a threshold is over- or under-passed the system emits immediately an alert message by SMS to up to 4 different mobile phones (optional also as fax). Further the system also informs about the end of a state of alert by SMS.

Info-Mode

The user can retrieve at any time the status of all attached sensors and of the internal relay by mobile phone (password - SMS), like for example the actual temperature. No logging of data.

Control-Mode

The user can switch the internal relay at any time by mobile phone (password - SMS). By choice the switch action can also be triggered automatically when an alert-threshold is over- or underpassed. Relay: switch contact max. 250 VAC, @ 8A.

Quickstart Now_SMS

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When receiving the Now_SMS unit, the sensors are normally already connected to the base unit, and the device is already programmed (Alert – Thresholds and phone numbers for Alert). In case a re-programming should become necessary, please see chapter Programming of Now_SMS.

However, in most cases just the steps described below are necessary to start working with the Now_SMS Instrument:

1. Deactivate the security PIN on the SIM-Card (Now_SMS requires a SIM Card with deactivated PIN)!

   The activation or deactivation of the security PIN is saved on the SIM card. To deactivate the PIN, a mobile phone is used.

   To do this, please put the SIM card to be used in the Now_SMS first into your mobile phone, next switch the mobile phone on, and access the security settings of the mobile phone to deactivate the security PIN. For details please see the manual of your mobile phone.

2. Put the SIM-Card into the SIM Card holder in the Now_SMS

   (Please disconnect the Now_SMS from power for this step)

Put the SIM Card (security PIN deactivated) in the SIM card slot of the Now_SMS. (Similar like with many mobile phones).

3. Install the Now_SMS and the Sensors at site to be measured

4. Connect the Now_SMS to power (standard 12 V DC Car battery)
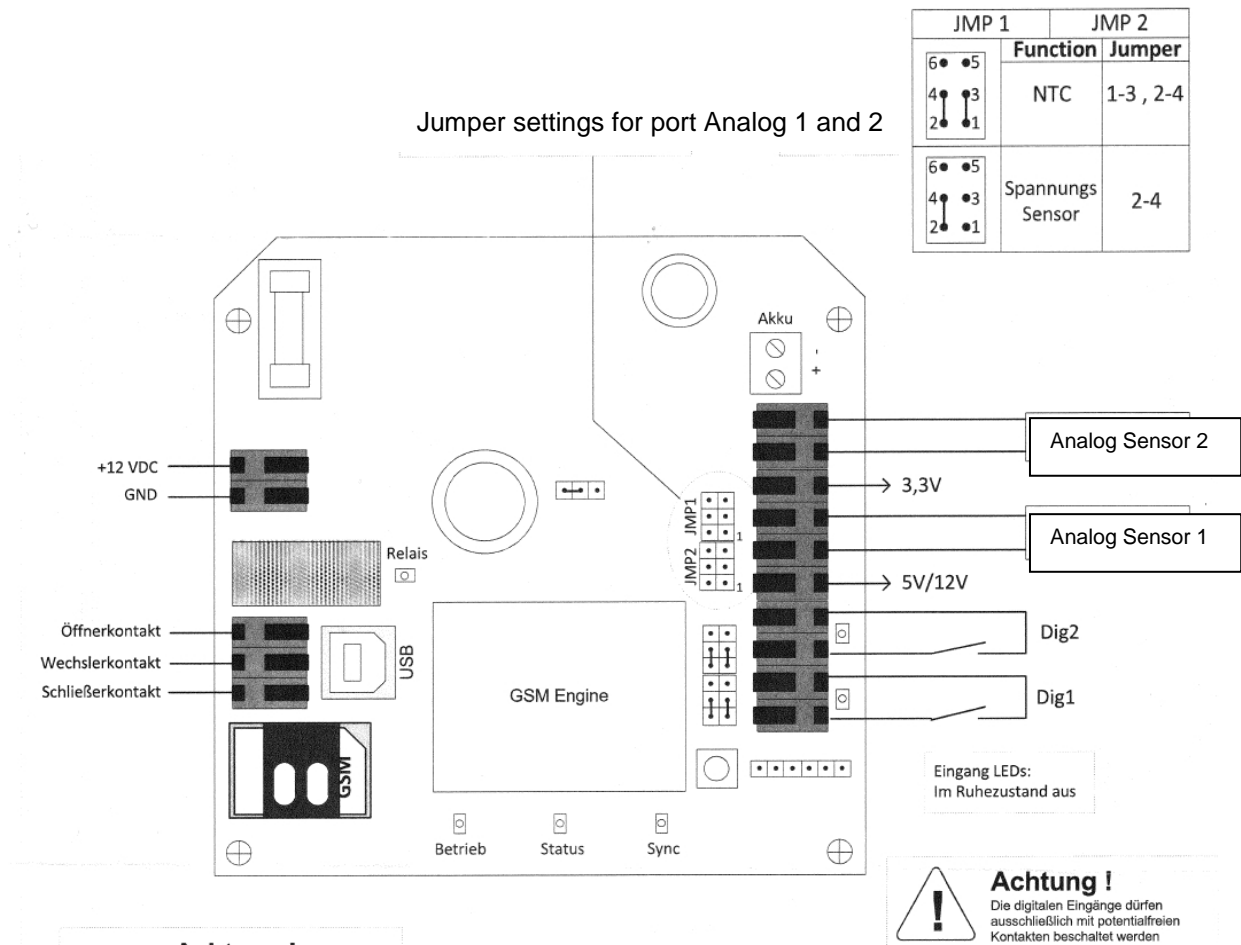   (**red** cable to power, **black** cable to minus)

The Now_SMS unit can be fixed to
the battery with cable ties.
Protect the battery against rain.

5. Please wait until the Now_SMS unit has booked itsself into the GSM network (Status indicated by LEDs, please see next page for LED blinking code).
6. Eventually test the function of the Now_SMS unit
7. Fix the lid of the Now_SMS firmly to the box

The "Inside" of the Now_SMS (Improved Version 2014)

	JMP 1	JMP 2
	Function	Jumper
6● ●5 / 4●─●3 / 2● ●1	NTC	1-3 , 2-4
6● ●5 / 4●─●3 / 2● ●1	Spannungs Sensor	2-4

Jumper settings for port Analog 1 and 2

The digital inputs can be connected exclusively with potential-free contacts

LED- Informations

Status LED:

The STATUS LED is on continuously during the initialisating. After completion of the initialization phase, the LED starts flashing to indicate Modem is ready for use.

Immediately after applying the operating voltage, the system connects to the GSM network. This process may take up to 2 minutes depending on the reception location.

Mode = Modem logged. Self-test OK

Sync LED flashes (3 s off, 75 ms on), STATUS

LED flashes cyclically (on / off)

Sync LED:

This LED indicates the status of the integrated GSM modem. When powered on it begins to shine (initialization). after a moment they begin to flash (Web search). Once the modem is logged in this LED begins shortly flashing.
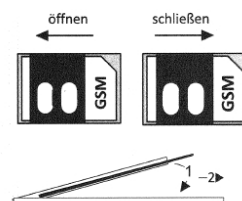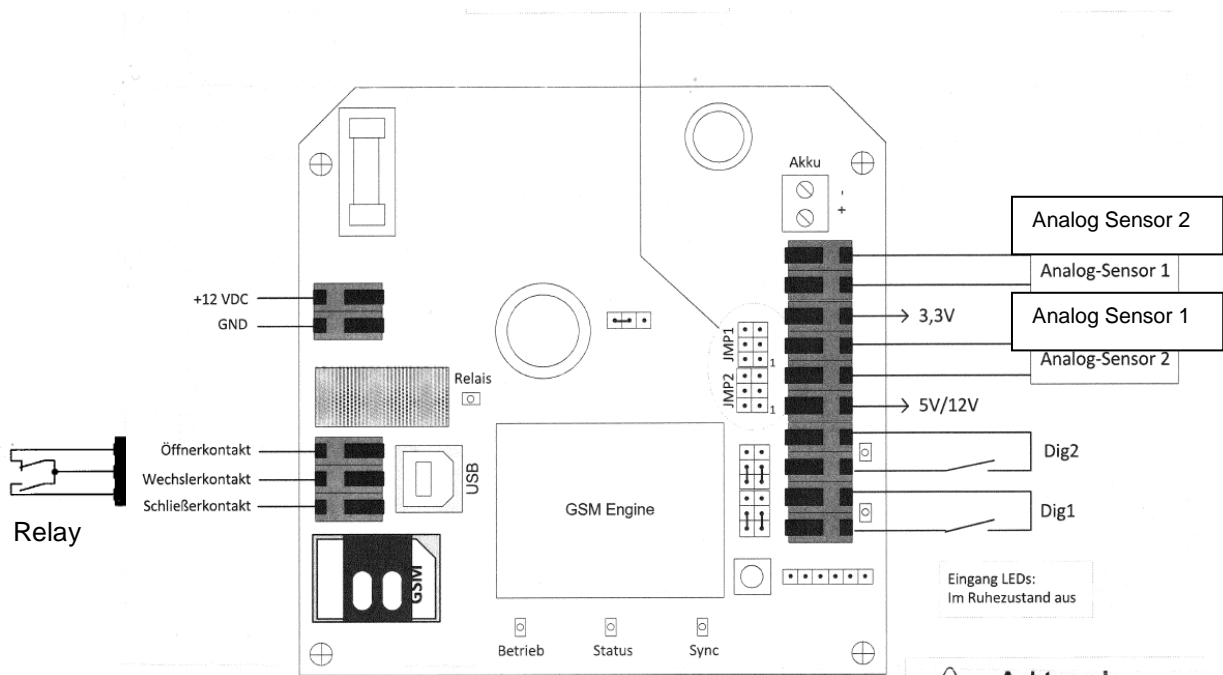
How to connect different Sensors to Now_SMS
(Improved Version 2014)

The inside of the NOW_SMS Instrument:

Jumper setting for Analog Sensors:

JMP 1		JMP 2
	Function	Jumper
6• •5 / 4┤ ┤3 / 2┘ └1	NTC	1-3 , 2-4
6• •5 / 4┤ •3 / 2┘ •1	Spannungs Sensor	2-4

Akku

+12 VDC
GND

Relais

Öffnerkontakt
Wechslerkontakt
Schließerkontakt

Relay

USB

GSM Engine

GSM

Betrieb   Status   Sync

JMP2 JMP1

Analog Sensor 2
Analog-Sensor 1
3,3V
Analog Sensor 1
Analog-Sensor 2
5V/12V
Dig2
Dig1

Eingang LEDs:
Im Ruhezustand aus

Achtung !
Die digitalen Eingänge dürfen ausschließlich mit potentialfreien

Relay contacts:

NC contact
Cange over contact
NO contact

The Ports of Now_SMS

Analog Ports:

Provide measured Values (i.e. Temperatures, Centibar etc.)

Can be used for setting Alarm thresholds

Will accept following Sensors:

       Air Temperature

       Soil Temperature

       Combination Sensor dry-bulb / wet-bulb Temperature

       Combination Sensor for Air Temperature & rel. Humidity

       Volumetric / Capacitance FDR Sensor for water content (Type HS-10)

Digital Ports:

Provide Status Information (i.e. Contact closed / Contact open)

Can be used for Alarm

Will accept following Sensors:

       Switch Tensiometers

       Switch Closure Sensors (Switching Pressure Gauges, i.e. Irrigation on/off)

       Sensor for Level of Liquids

Relay Port:

Can handle Power of 250 V AC, 8 Ampere (for electrical pumps, Ventilation etc.)

Can handle Power of 12 V DC (for LED blinking Alarm Lights etc.)

The Sensors for Now_SMS units

A. Sensor for Air Temperature

One Now_SMS unit accepts up to two sensors for air temperature.

- High quality Convection cap
- Measuring Range –20 to +120° C
- Accuracy ±0,2 °K
- Cable 5 m, with protective hose
- L – holder

Installation for Temperature control in plastic Tunnels:

Sensor should be located above the canopy on a post. The convection cap should be in free air-flow. Please measure in the middle of a tunnel.

B. Combination Sensor dry-bulb / wet-bulb Temperature

One Now_SMS unit accepts one combination sensor for wet-bulb / dry-bulb temperature.

- Wet bulb Temperature with wick and water reservoir
- Dry bulb Temperature in free flow of air
- Measuring Range –20 to +120° C
- Accuracy ±0,2 °K
- Cable 3 m, with protective hose
- U – Holder stainless steel
- water reservoir250 ml, easy re-filled, sufficient for 2 to 3 weeks

Installation for Frost protection:

The combination sensor should be placed in the hight of the lowest plant part, which has to be protected (lowest flowers). The U-holder should be mounted at the end of the post, so that it is in free flow of air. Please check the water reservoir regularly.

C. Sensor for Soil Temperature

One Now_SMS unit accepts up to two sensors for soil temperature or a combination of one Sensor for Air- and one for Soil Temperature.

- Piercing – Sensor stainless Steel

- Measuring Range –20 to +120° C

- Accuracy ±0,2 °K

- Cable 5 m, with protective hose

- Available in 10cm, 20cm, 30cm and other length

Installation for Temperature Management in Asparagus with

black-white foil: Standard measuring depth for this application is 20cm under Damsurface. Push Sensor straight into the Asparagus Dam and cover it again with the b-w foil.

D. Combination Sensor for Air Temperature & rel. Humidity

One Now_SMS unit accepts one combination sensor for Air Temperature & rel. Humidity.

- High quality Convection cap

- Accuracy Temperature ±0,3 °K

- Accuracy rel. Humidity ±3% (10 to 90% rel. H)

- Cable 3 m, with protective hose

- L - holder

Installation for control of Temperature & rel. Humidity in plastic Tunnels:
Sensor should be located above the canopy on a post. The convection cap should be in free air-flow. Please measure in the middle of a tunnel.

F. Volumetric Soil Water Content FDR Sensor Typ HS-10

One Now_SMS unit accepts up to two volumetric / capacitance FDR Sensors.

- Measuring Range 0 to 57% Soil Water content

- Maintenance-free and frost-proof Sensor

- Accuracy ±3%

- Cable 5 m, with protective hose

Installation:

Please see our separate Installation Instruction and our Installation video on our Homepage.

G. Switch Tensiometer

Switch Tensiometer are connected to the digital ports of the Now_SMS unit, and are used to trigger an SMS-Alert as soon as the soil needs irrigation. One Now_SMS unit accepts up to two Switch Tensiometers, further also chains of several switch Tensiometers can be connected.

- Adjustable Switch Tensiometer Type TXS
- Switch point freely adjustable between 100 and 300 hPa Soil Water potential
- Cable 3 m
- Available for Measurement in 20cm, 30cm, 50cm and 60cm

Installation:

Please see our separate Installation Instruction and our Installation video on our Homepage

I. Sensor for Irrigation Duration (Switch closure)

Switch closure Sensors are connected to the digital ports of the Now_SMS unit, and are used to trigger an SMS Message as soon as the water system is pressurized (= the Irrigation system is running). Further these sensors are also used to control the operation of irrigation machines. One Now_SMS unit accepts up to two Switch closure sensors.

- Waterproof Sensor, with fixed or adjustable swicht point available
- Standard: Switch-point 0,3 bar pressure in system, max. pressure 4,0 bar (other versions available)
- Cable 3 m
- Standard: With T – Connector for direct installation in drip line. (Other connections available)

Installation for Irrigation controll:

Normally this sensor is installed directly in the drip line, like a standard fitting.
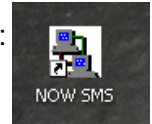
Programming of the Now_SMS

For Programming the Software "Comserver" is used. This Software is included.

First the Comserver Software must be installed on the Computer, from where the Programming of the Now_SMS is done.

The setup file is called " ComServerNowSMSSetup" and should be run for installation the usual Windows way.

The program will install it's self on the hard drive, and create an Icon on your desktop:

<u>Now_SMS Instrument can be programmed via USB Cable connection-channel:</u>

-   Direct Connection via RS 232 serial port / USB Serial Port

For programming the Now_SMS a connection must be active.

Direct Connection via RS 232 Cable / USB Cable

Important:

Please do not open the RS 232 Connection during start up of the Now_SMS. Please wait, until the LEDs show following status:

LED Use: On

LED Status: Blinking every 1 Sec. (Modem ready for use)

LED Sync: Blinking every 2 Sec. (Now_SMS booked in network successfully)

If the Now_SMS is blinking like described above, the USB serial cable can be plugged in the Computer and the serial port of the Now_SMS

Then start the Comserver Program. Go to Options to set the language.

Programming Alerts, Thresholds etc. step by step

After your connection to the Now_SMS (USB/ RS 232) is established, the actual programming can take place. For this, please first click "Devices". Usually a new address (location, customer etc.) must be created.
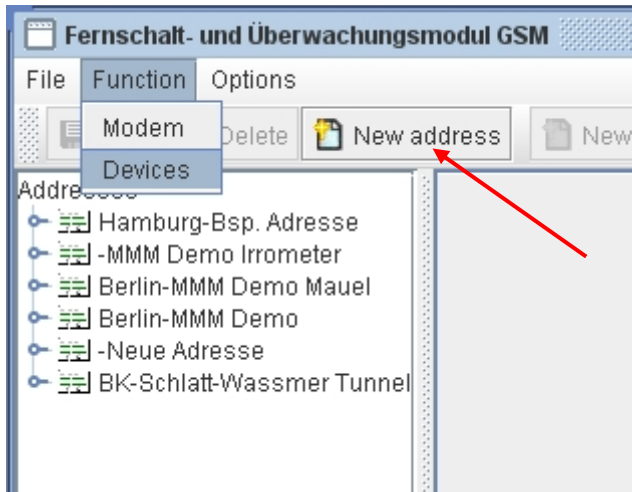
As soon as this new address is complete and has been saved, a new device is created.
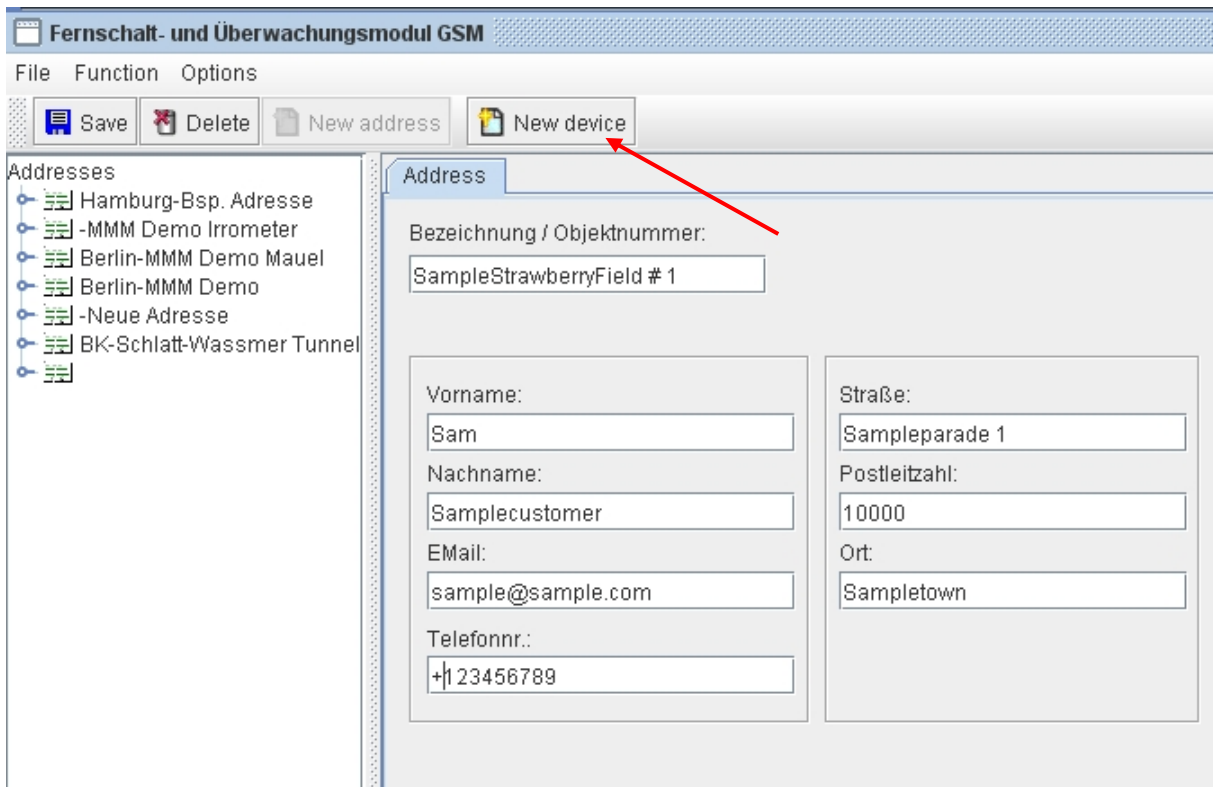
The next step is to open the Connection with the Now_SMS via USB / RS 232 Cable.

Please check box for SERIAL connection.

The Modem Connection: option is due to changes in Mobile Phone Networks no more available

Please click "Verbinden" to connect to your Now_SMS

Please click "Schließen" to disconnect from your Now_SMS after the programming is done

Please choose here the number of your Com port, and it's appropriate baud rate

After the connection is open, please first hit the Card "Allgemein / General"

Please put in here the password for retrieval of Status / Info Messages by SMS.
Important: Capital letters or not does matter!

Please put in here the phone numbers for alert SMS

Please put in here the text for con-firmation of alert SMS

Please put in here the passwords to switch on the Relay by SMS.
Important: Capital letters or not does matter!

Please put in here the passwords to switch off the Relay by SMS.
Important: Capital letters or not does matter!

eventually already existing settings can be retrieved by clicking on the button "Daten lesen / Read"

Also possible to choose email address when push email service present

Important:

The emission of alert messages has priority in the Now_SMS system. The system reads out all attached sensors every minute. In case a value is above / below thresholds, an alert message is sent immediately. Even if a connection (USB/ RS 232) is presently established, the system will disconnect this connection to emit the warning / alert message in case the sensors measure values above / below thresholds.

To avoid problems related with this, the phone number(s) / email for alert SMS should always be filled in at the end of programming a Now_SMS system, just before the new settings are transferred to the Now_SMS.

Use only alphanumeric characters (123…ABCdef) for device name and alarm text.

The alert procedures of Now_SMS units:

The Now_SMS offers two alert procedures for choice:

Alert Procedure A: The SMS Alert message is sent **simultanously** to all registered mobile Telephone Numbers.

Alert Procedure B: The SMS Alert message is sent **consecutively / in succession** every 3 Minutes to all registered mobile Telephone Numbers, as long as not one of the recipients does confirm the alert message by SMS.

Please put in here the phone numbers for alert SMS.

If Alert Procedure A shall be activated, this field must remain empty.

If Alert Procedure B shall be activated, the text for confirmation of SMS alert must be put in this field.

In case Alert Procedure B was activated (by putting a confirmation text into the box) the alert message will be sent first to the phone number in the upper box for telephone numbers. If the user of this phone does confirm the alert within 3 Minutes message by sending the confirmation-password-SMS to the Now_SMS unit, no more alert messages will be sent to the other registered phone numbers. In case the alert message will not be confirmed within 3 Minutes after emission, another alert SMS will be sent to the next telephone number. This procedure is repeated until the Alert-SMS is confirmed by one of the users, or until an Alert-SMS has been sent to all registered phone numbers

After the Card "Allgemein / General" has been filled in, please hit the card "Digital"

(Please disregard this step, when no digital sensors are attached)

Important:

The Now_SMS will send an alert message when triggered by sensor to all mobile phones listed in Card "General".

When the alert is finished (i.e. the contact back in it's normal position) the Now_SMS will send an SMS message about the end (Ende) of the state of alert / contact closure.

When the box "Alarm als Sammelstörung ausgeben" is checked, the Now_SMS will still send the SMS messages on begin and end of alert / contact closure status, and additionally it will switch on automatically the internal Relay at begin of alert / contact closure state, and it will automatically switch off the internal Relay at end of alert / contact closure.

But when the box "Alarm als Sammelstörung ausgeben" is checked, it is not possible to "manually" switch the internal Relay by SMS command.

After the Card "Digital" has been filled in, please hit the card "Analog"

(Please disregard this step, when no analog sensors are attached)

Please choose from drop down menu the type of analog sensor

Please choose here the upper and lower thresholds of the analog sensor

Please check this box, if you would like the Relay of the Now_SMS to switch when an alert is triggered by port / sensor #1

Please proceed here for port # 2, according to settings of analog port / sensor # 1

Please choose here the time of state of alert necessary to trigger an alert SMS

Please write in here the text of Alert SMS of analog port / sensor # 1

Important:

The Now_SMS will send an alert message when triggered by sensor to all mobile phones listed in Card "General".

When the alert is finished (example: the temperature below, or soil again wetter than it's warning threshold) the Now_SMS will send an SMS message about the end (Ende) of the state of alert.

When **the box "Alarm als Sammelstörung ausgeben"** is checked, the Now_SMS will still send the SMS messages on begin and end of alert status, additionally **it will switch on automatically the internal Relay** of Now_SMS at begin of alert, and it will automatically switch off the internal Relay at end of sate of alert.

But when the box "Alarm als Sammelstörung ausgeben" is checked, it is **not possible** to "manually" switch the internal Relay by **SMS command**.

After all settings have been done, please go back to card "Allgemein / General". Click the buttom "Write" to program all settings.

3. After new settings have been sent successfully, please disconnect from Now_SMS by clicking on "Close Connection"

1. Please fill in now the phone numbers to receive alert / warning messages

2. After the phone numbers have been filled in, please send the new settings to the Now_SMS By Click on "Write"

Important:

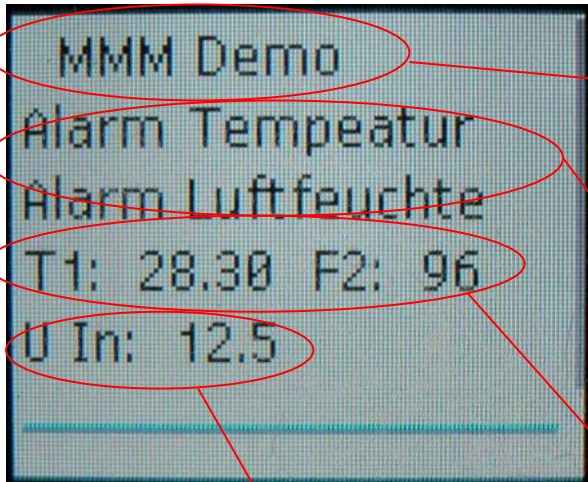The Now_SMS will keep all settings, even if disconnected from power or the SIM Card exchanged.

Please make sure the Housing of the Now_SMS is always firmly closed, and the compression fittings where the Sensor cables enter the housing are well tightened.

The inside of the Now_SMS has to be kept clean and dry to avoid malfunction. All electrical installations have to be performed by a trained professional.

The Alert and Info Messages by SMS

A. The Alert SMS Message

In this example a combination Sensor for Temperature & rel. Humidity is connected to the unit

Name of the unit (here MMM Demo). The name is given by user via the ComServer Software. It appears in every SMS, for easy identification of the device.

The Text „Alarm Temperatur" and „Alarm Luftfeuchte" is put in by the user. (Different text possible)

T1: Temperature in °C (Threshold was set at 25 °C)
F1: rel. Humidity in % (Threshold was set at 80% rel. Humidity)

U In: Shows actual current of battery in Volt. Here 12,5 Volt. (available after April 2011)

B. The SMS Message „End of Alert"
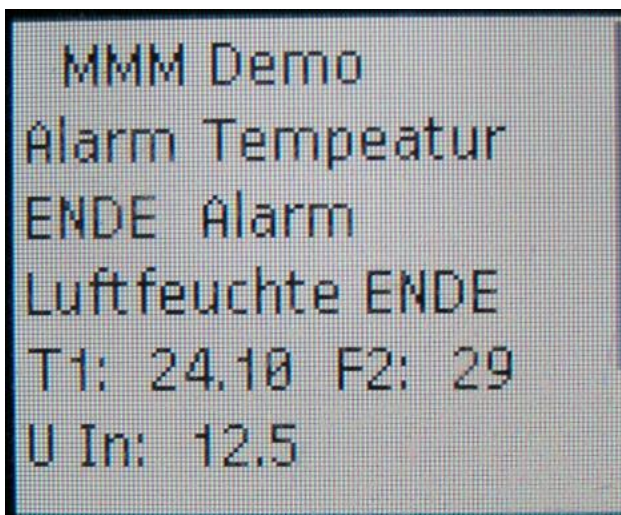
Please see explanation of SMS Text above

C. The information Message by SMS (Info-SMS)

To get an information SMS from the Now_SMS unit, the user just needs to send an SMS message with the current password to the Now_SMS unit. (Standard-Password = 1234). Within 1 to 2 Minutes the unit will send an Info-SMS to the phone from which the demand (Password) was sent. The picture below shows such an Info-SMS:
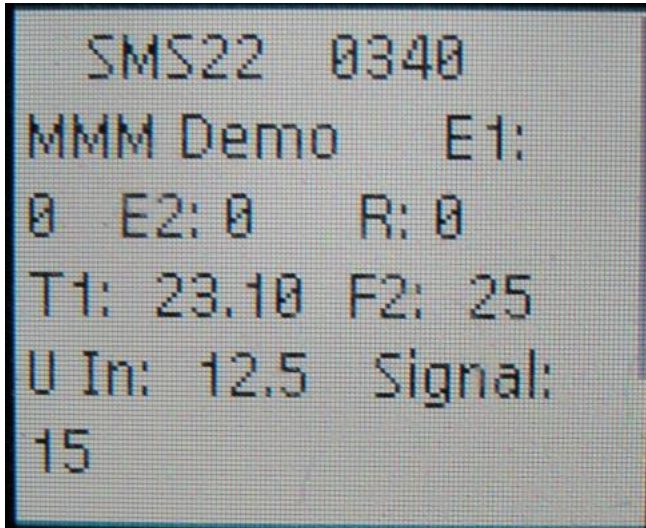
MMM Demo: Name of the unit (by free choice of user)

E1: Status of digital port No 1:

      If = 0 contact is open, if = 1 contact is closed

E2: Status of digital port No 2:

      If = 0 contact is open, if = 1 contact is closed

R: Status of the internal relay:

      If = 0 contact is open, if = 1 contact is closed

T1 or F1: Status of analogue port No 1:

      Shows the current measurement value of Sensor No 1 (unit according to sensor type)

T2 or F2: Status of analogue port No 2:

      Shows the current measurement value of Sensor No 1 (unit according to sensor type)

U In: Shows actual current of battery in Volt. Here 12,5 Volt. (available after April 2011)

Connection of Sensors

Important:

If Sensors should be exchanged, please always first disconnect the NOW_SMS from Electricity ! !

Jumper settings- for Analog Sensors:

Depending on which Sensor Type shall be connected to the NOW_SMS Unit it is necessary ti set the Jumper- Switches accordingly:

Jumper setting for Analog Sensors

JMP 1	JMP 2	
	Function	**Jumper**
6● ●5 4●‖●3 2● ●1	NTC	1-3 , 2-4
6● ●5 4●‖●3 2● ●1	Spannungs Sensor	2-4

One Jumper for:

Decagon HS-10

Combi – Sensor Airtemp. & rel. Humidity

Both Jumper for:

Air-temperature (NTC)

Wet- Dry- temperature (NTC)

Soil-temperature (NTC)

Important:

Please always disconnect the power supply prior to any change of the Jumper - settings ! Change Jumper position only without power supply !
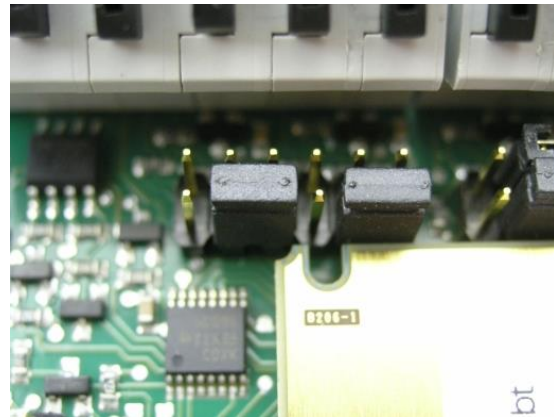
The jumper with simultaneous use of temperature sensors und Sensors for soil moisture or other voltage sensors:

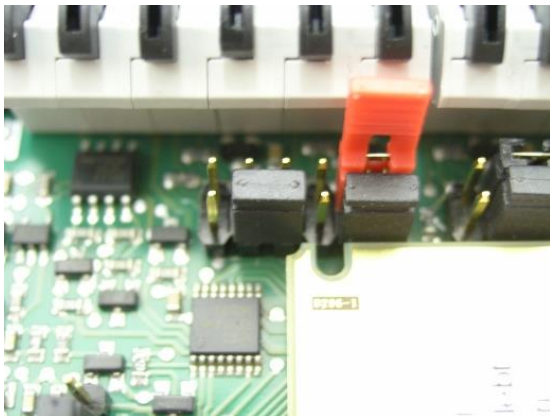Depending on your sensor – combination, please set the jumpers as follows:

For two temperature sensors:

For two soil moisture or voltage sensors:

For soil moisture on 1 and Temp. on 2
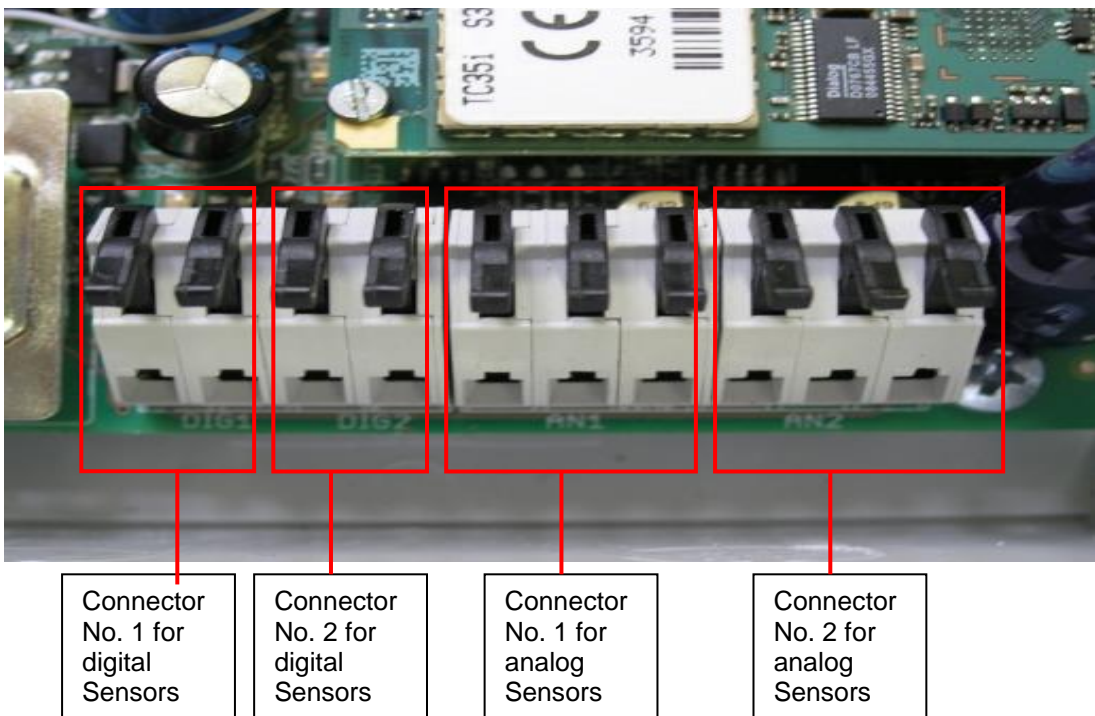

For Temp. on 1 and soil moisture on 2

Important:

Please always disconnect the power supply prior to any change of the Jumper - settings ! Change Jumper position only without power supply !
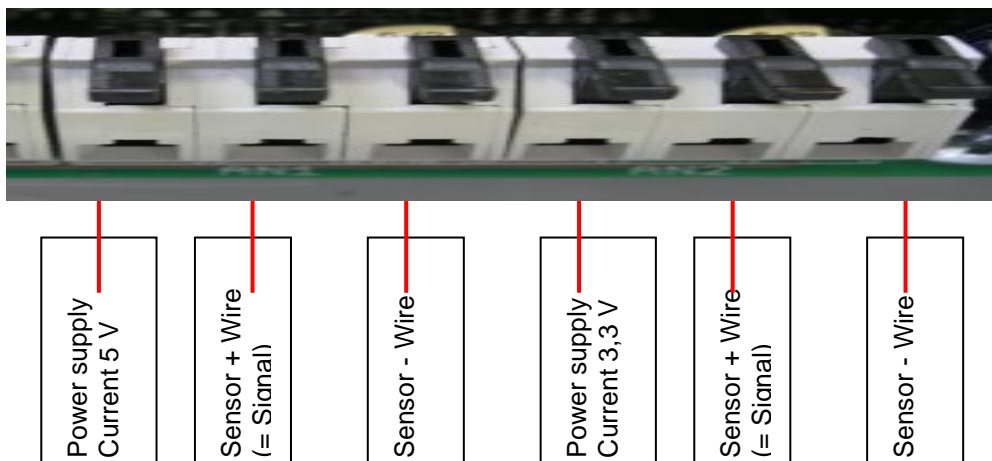
Important:

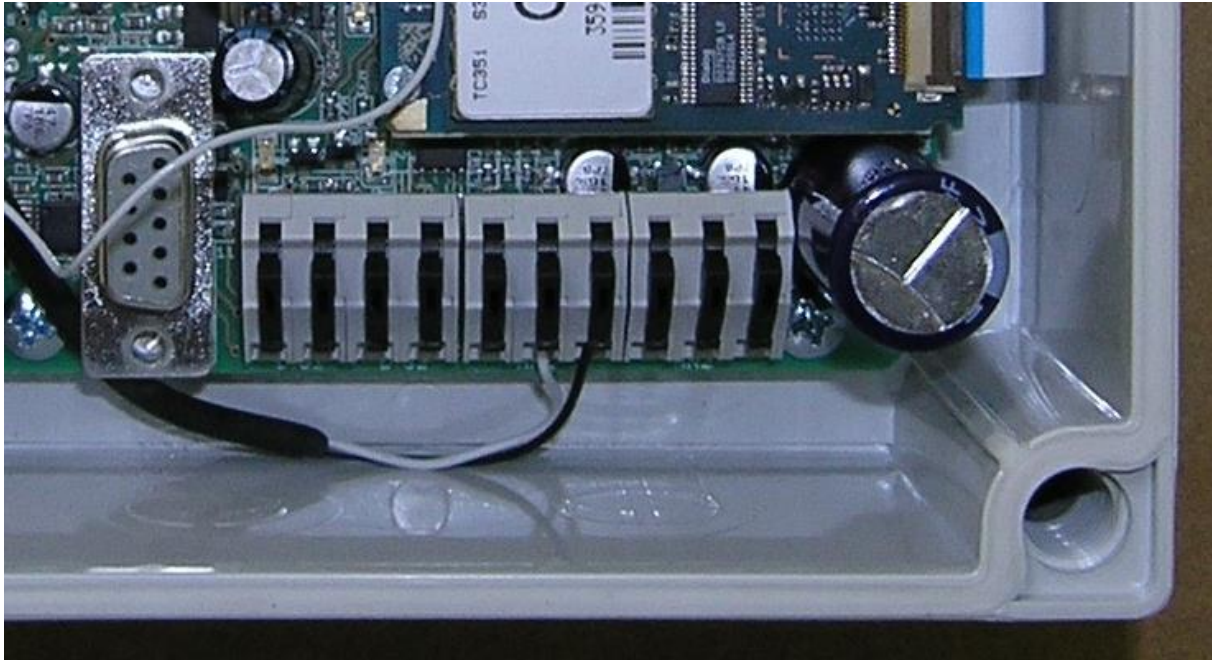**If Sensors should be exchanged, please always first disconnect the Now_SMS from Electricity !**

The Connection for Sensors:

| Connector No. 1 for digital Sensors | Connector No. 2 for digital Sensors | Connector No. 1 for analog Sensors | Connector No. 2 for analog Sensors |

Describtion of the analog Connectors:

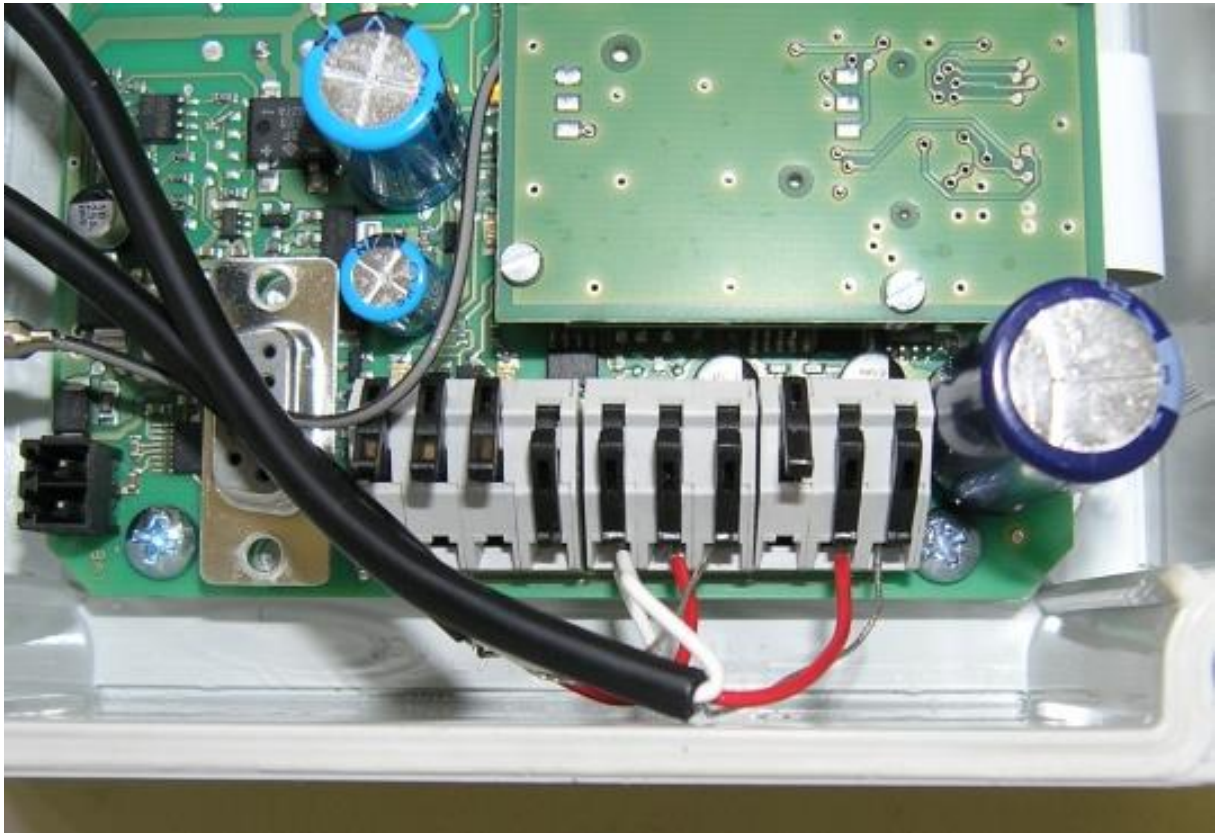| Power supply Current 5 V | Sensor + Wire (= Signal) | Sensor - Wire | Power supply Current 3,3 V | Sensor + Wire (= Signal) | Sensor - Wire |

Connection of NTC Temperature Sensors:

NTC Temperature Sensors are connected to the analoge Connectors, but the Current / power supply remains empty.

The white wire has to be connected to Plus/Signal

The black wire has to be connected to Minus

To use NTC Temperature Sensors, the position of the Jumper has to be changed. Please disconnect the Now_SMS unit from power, prior to any change of the Jumper position!

Connection of volumetric FDR Sensors Type HS-10

The wires of HS-10 Sensors

Bare = Minus

White = Power supply (Current)

Red = Plus/Signal

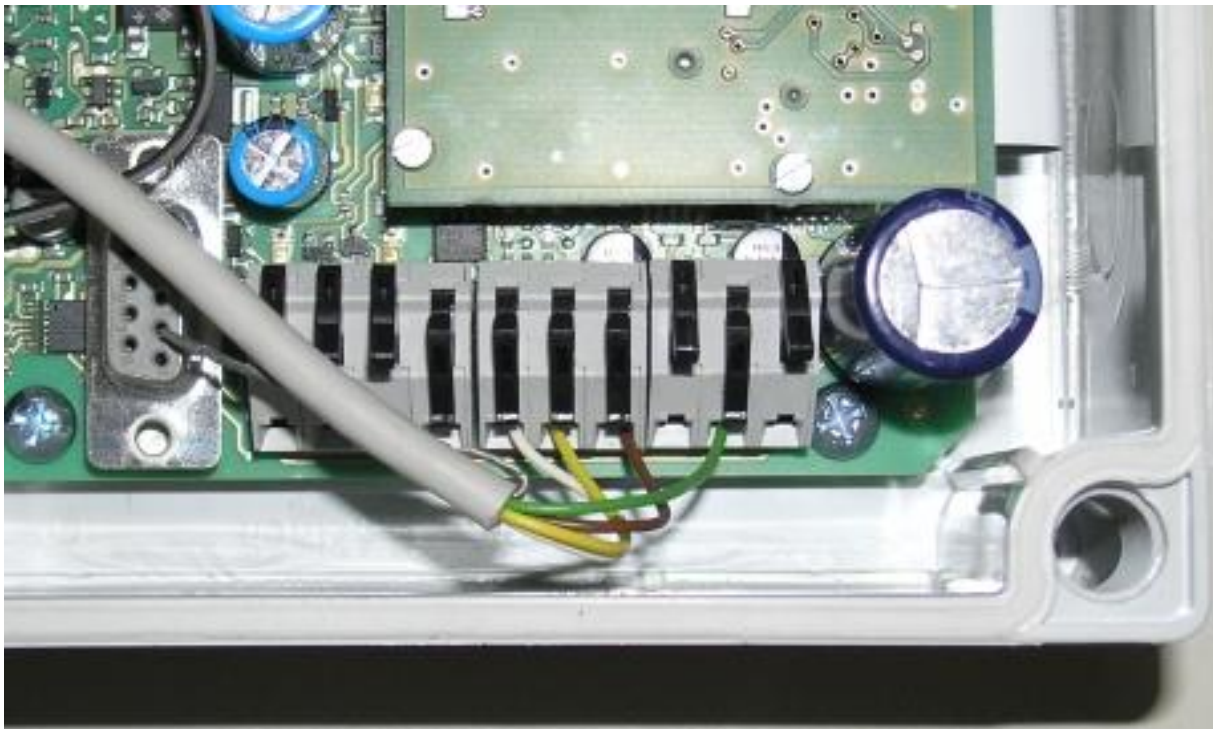Connection of HS-10 Sensor No. 1 to Analog – Connector No. 1:

Bare to Minus, Red to Plus/Signal, White to Power supply (Current) 5,0 V or 3,3 V

Connection of HS-10 Sensor No. 2 to Analog – Connector No. 2:

Bare to Minus, Red to Plus/Signal, White to Power supply (Current) 5,0 V or 3,3 V

☐

Connection of Combination Sensor Temperature & rel. Humidity

The wires of Combination Sensor Temperature & rel. Humidity

Bare = Not used (Ground)

Analogue Connection No 1

White = Power supply (Current 5V DC)

Yellow = Plus/Signal (Temperature)

Brown = Minus

Analogue Connection No 2

Green = Plus/Signal (rel. Humidity)

With this Sensor both analogue ports of the Now_SMS are used. Analogue port No. 1 = Temperature, analogue port No. 2 = rel. Humidity

Connection of all models of digital Sensors:

- <u>**Switch Tensiometer**</u>
- <u>**Water pressure (Irrigation duration, Irrigation is working)**</u>
- <u>**Level of Water and other Liquids**</u>
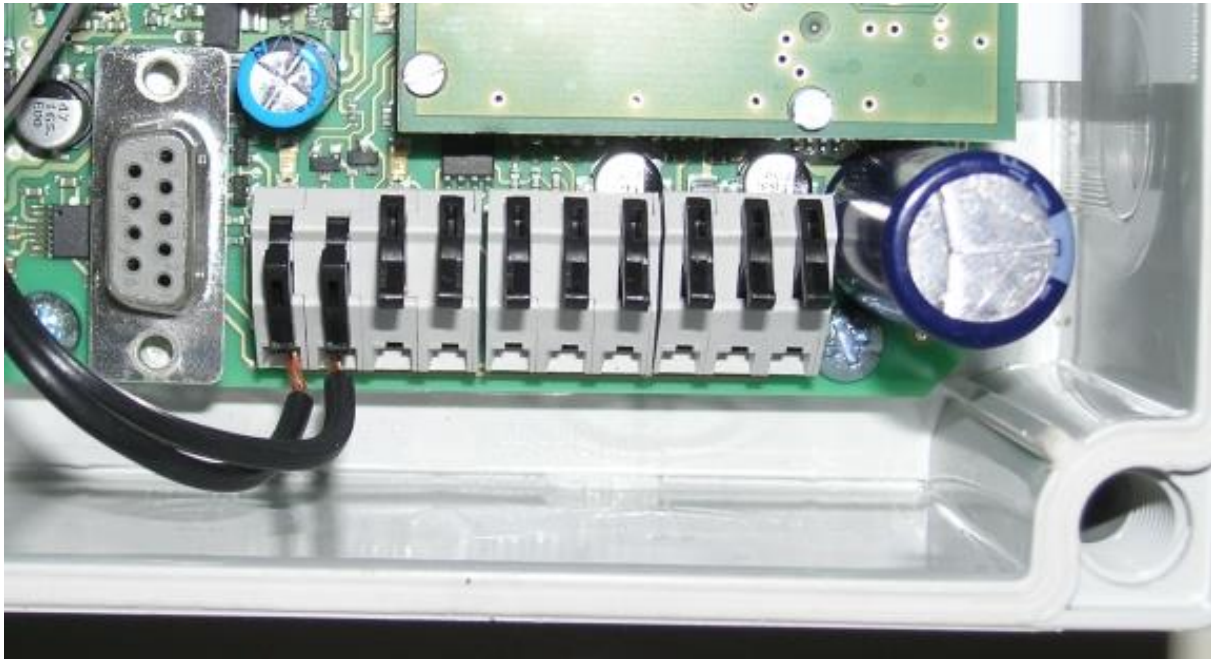
Any digital Sensor can be connected on either digital connection No. 1 or digital connection No. 2 (Picture: One digital Sensor is connected to Port No. 1)

All digital Sensors provide just the information „Contact is closed" or „Contact is open"

How to use Now_SMS with a Rain Gauge

The Now_SMS device can be used with a rain gauge. The rain gauge can be connected to the digital **port number. 1**.
Thus, the two analog ports remain freely, and can also be connected with sensors for soil moisture or temperature..

To set the device in **Rain modus**, you have to set the modus "Impuls" in the Setup for the Digital Port Nr. 1:

Operating Instructions of the rain gauge

The rain gauge records continuously the fallen precipitation, with a resolution of 0.2 mm and shows the entire rain since the last reset of the counter to zero.

The counter could be set to zero at any time by sending the SMS command "0000" (four zeros, without quotation marks, commas or spaces). Sending 0000 via SMS to the unit, the counter is immediately reset to zero.

By sending the query password via SMS (Standard Query password: 1234) the unit is sending a feedback via SMS within 2 minutes, which shows the current status of the rain gauge. (If there are other analog sensors connected, the current measured value of these sensors is also displayed in the text message).

Typical approach by using the Rain Gauge:

A. <u>Rain Gauge for warnings</u>:

To receive an automatic message via SMS, when a certain amount of rainfall exceeds a threshold (eg 25mm) entered in the corresponding window in the software and stored in the device.

This function serves as to determine whether remote **areas are drivable with heavy machines**, or whether a **flood wave** could be expected in a river bed after exceeding a certain rainfall in the catchment area.

B. <u>For detection of total rainfall within individual areas</u>:

For example, to capture the weekly or monthly precipitation on a given area, set the counter back to zero at the beginning of each week or month. Thereafter, you could send a SMS query to see the precipitation on the relevant area since the beginning of the week or month.

C. <u>Recording the daily precipitation</u>

To record the daily rainfall, the level of the rain gauge must be checked every day.

If the counter was set to zero, for example in the morning of the first of the month, and during this first day a precipitation of 6 mm has fallen, the status-SMS shows 6mm until the next rain falls. So if the status query shows 6mm on the evening of the first, and if it shows on the 2nd and 3rd of the Month also 6mm, no rain has fallen on the corresponding area on the second and third day. If the status query on day 4 shows 11mm of total rainfall, so the precipitation on the 4th day was 5mm (11mm - 6mm = 5mm).

Installation and maintenance of the Now_SMS device with Rain Gauge:

The Now_SMS Rain unit is always supplied with a stainless steel mounting pole.

The mounting pole is provided with several holes, so the device can be attached to a ground anchor or pole. When installing in the field, make sure that the rain gauge is leveled. For this on the top of the rain gauge a spirit level is mounted.
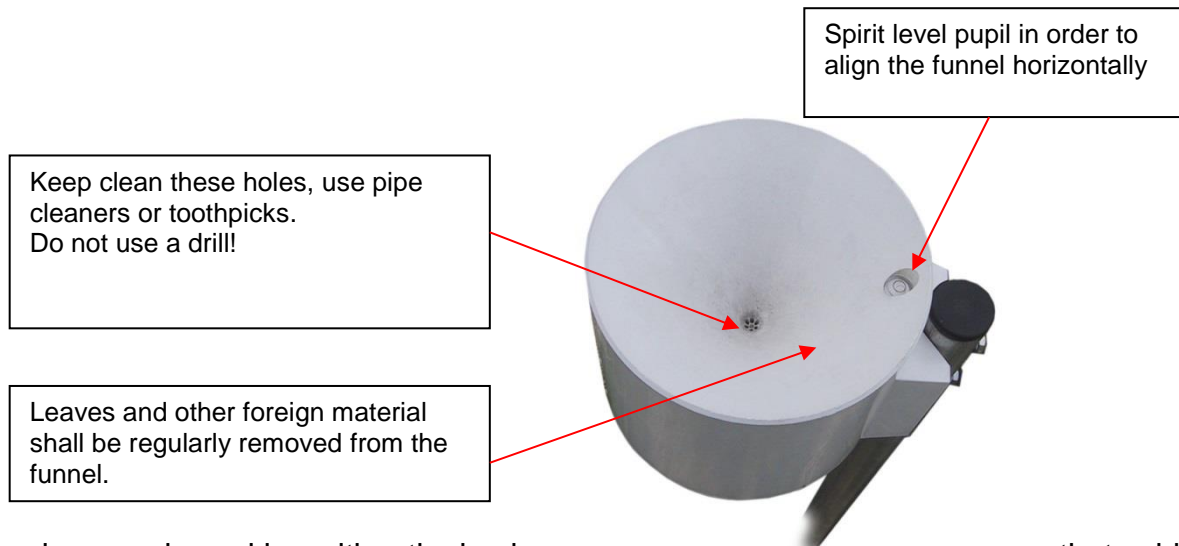

Reset the rain gauge to zero after the final placing in the field, since the tipping bucket has switching back and forth and begins to count during the in-field installation.

Maintenance of the rain gauge

Like all rain gauges this rain gauge needs also some maintenance and care, primarily the regular inspection and cleaning of the funnel.

Clean the funnel from leaves, dust, bird droppings and insects, they could accumulate and close the fine holes in the bottom.

Spirit level pupil in order to align the funnel horizontally

Keep clean these holes, use pipe cleaners or toothpicks.
Do not use a drill!

Leaves and other foreign material shall be regularly removed from the funnel.

The raingauge is working with a tipping bucket system. Sometimes it happens that spiders migrate into the interior of the rain gauge, and spin her net around the tipping bucket system. Thus, the function is blocked, and the tipping bucket system must first be cleaned from the cobwebs.

Therefore the measurement mechanism must be taken out of the rain gauge.

Procedure:

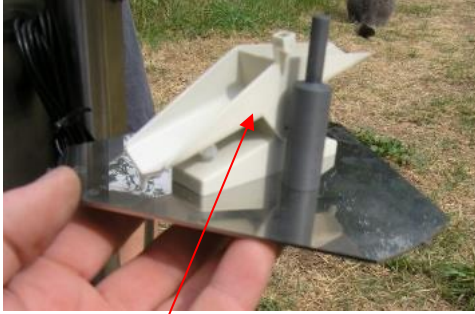1. How to release the mechanism from the rain gauge:

As indicated by the red arrows, the rain gauge has to be deformed by moderate pressure.The front mounting nipple becomes loose, and the mechanism can be folded down.
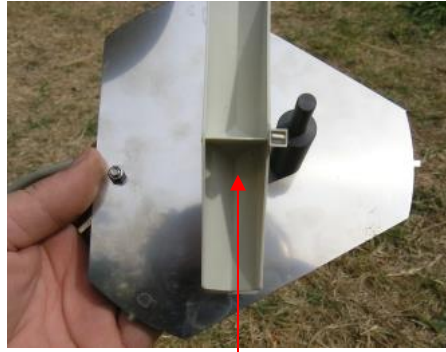
2. The tipping bucket mechanism of the rain gauge:

front mounting nipple

The tipping bucket has to switch back and forth. Clean the mechanism from cobwebs
One „tip" is counting 0,2mm of rainfall

The tipping bucket should be cleaned from all deposits, dust and sand periodically.

The internal Relais (Improved NOW_SMS Version 2014)

The relay output is a changeover contact (max. 250 VAC, 2 A). The relay status is maintained during power failure

How to connect different Sensors to Now_SMS

The inside of Now_SMS Instruments

Connection for Sensors, 2 analog Connections and 2 digital Connections

Opener contact (= normally closed)

Change over contact

Closer contact (= normally open)

Holder For SIM Card

Relay Connection

Jumper to be set according to Sensor Type