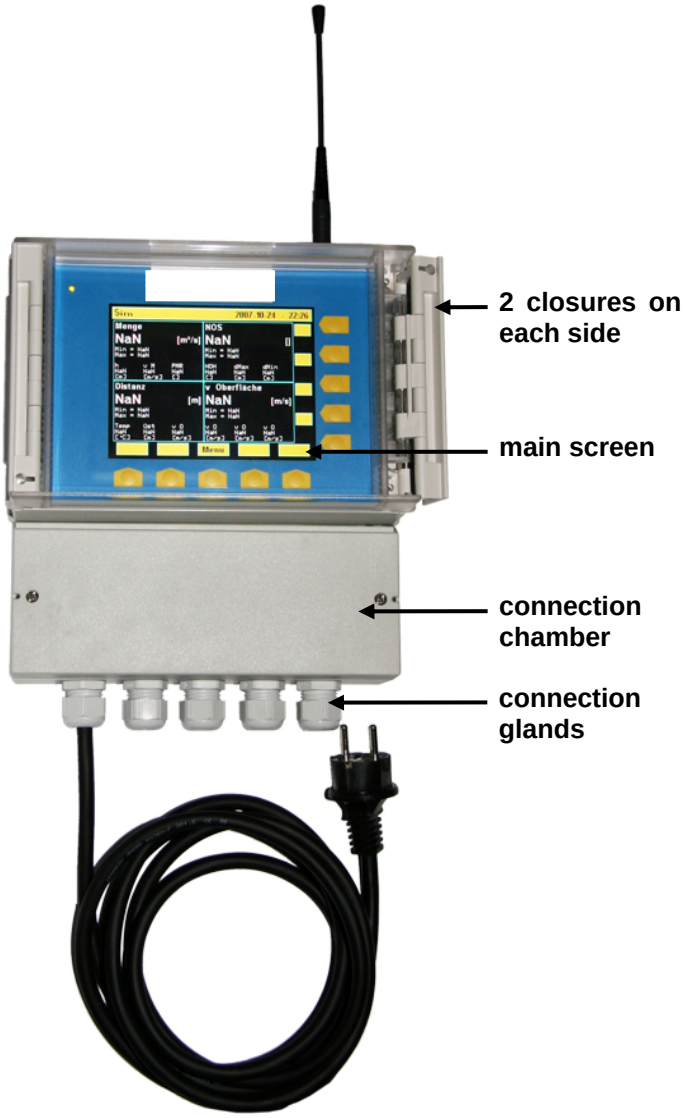
Unitrans

User Manual



Unitrans

Table Of Content:

00 Basics 3
00.10 Safety Precautions 3
00.20 Power Supply 3
00.30 Product Identification 3
00.40 Antenna 4
00.50 Fastening 4
00.60 Opening/Removing The Protective Cover 4
00.70 Installing A SIM 5
00.80 Installing a MMC/SD Card 5

10 Operation 6
10.10 Main Screen 6
10.10.10 Overview 6
10.10.20 GPRS State 7
10.10.30 Result Screens 7
10.20 Putting Into Operation 8
10.30 Troubleshooting 8

20 Configuration 9
20.10 Menu Overview 9
20.20 Detailed Sensor Settings 11
20.20.10 *FLO-DAR* Sensor 11
20.20.20 Ultra Sonic Sensor 12
20.20.30 Analogue Sensor 13
20.20.40 Digital Sensor 13
20.20.50 Calculation 14
20.20.60 Example Multiplication 14

30 Wiring 15
30.10 Connection Chamber 15
30.10.10 Terminal Box HW 1.0 15
30.10.20 Terminal Box HW 2.0 16
30.10.30 RS485 Terminierung 17
30.20 Wiring Examples 17
30.20.10 *Example 1* 17
30.20.20 *Example 2* 18
30.20.30 *Example 3* 19

00 Basics

The ***Unitrans*** is a universal measurement instrument allowing the usage of different types of sensors. The measurement values are stored on a non volatile memory and transmitted via GPRS to the ***myDataweb*** server. The measurement values can also be processed using the instrument's built-in calculation module, the digital or analogue outputs.

00.10 Safety Precautions

It's necessary to read and understand this manual before you apply the instrument.

The casing has to be cleaned only with mild cleansers.
The instrument must not be exposed to moist – neither to rain nor to hose water.
The device has to be operated according to the specifications. Direct sunlight has to be avoided.

Improper wiring might harm you and/or damage the instruments!
Special care has to be taken to avoid the influence of any magnetic or electric fields near the device.
Certain inherent dangers exist if the ***Unitrans*** is used in an improper or unintended manner (for example due to a bad connection).

In order to prevent malfunctions or damage to the instrument, only original parts have to be used.
Repairs and adaptations have to be done by the manufacturer.
Only qualified personnel, authorized by the manufacturer, may undertake the installation, electrical connection, putting into operation and maintenance.

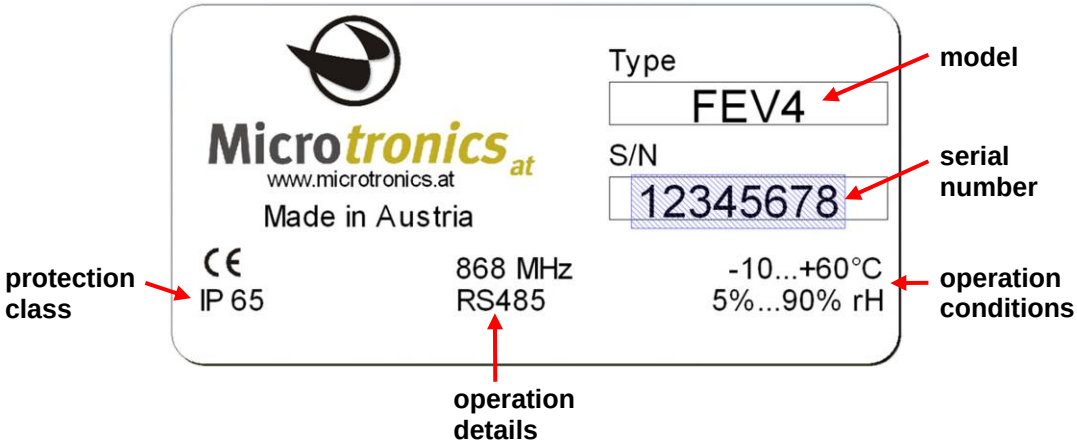
Never touch the electronic components.
Never connect a digital output to an analogue input!

00.20 Power Supply

The ***Unitrans*** is powered by 110...230VAC. 24VDC on request.

A status LED indicates that the ***Unitrans*** is powered.

00.30 Product Identification



Unitrans

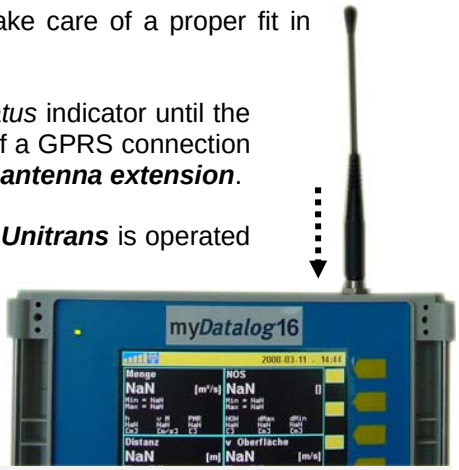
00.40 Antenna

Screw the antenna into the FME connector of the ***Unitrans***. Take care of a proper fit in order to prevent moisture intruding the enclosure.

When you put the ***Unitrans*** into operation monitor the *GPRS status* indicator until the GSM signal strength is satisfying. Check the antenna placement if a GPRS connection can not be established. Eventually take advantage of the optional ***antenna extension***.

Keep in mind that the GSM signal strength might decrease if the ***Unitrans*** is operated in control cabins.

Aware that a good GSM signal strength secures a fast and proper GPRS transmission and therefore saves time and money.



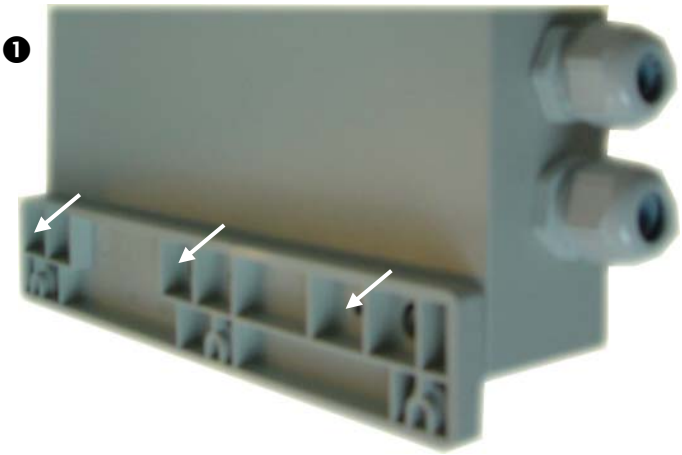
00.50 Fastening

❶ Install the fastening rail on the ***Unitrans*** using the provided screws.
❷ Fasten the ***Unitrans*** with adequate mountings.

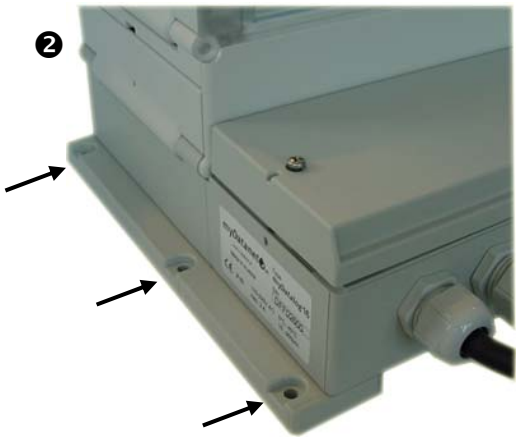
Take care of a proper fastening!
Obey eventual fastening regulations!

Connection intakes have to look downwards.

❶



❷



00.60 Opening/Removing The Protective Cover

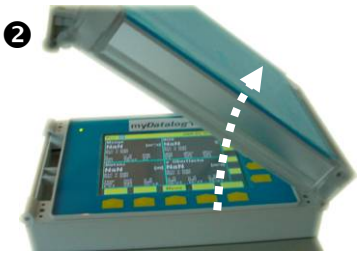
In order to remove the protective cover, just open the closures on both sides.

Always close the protective cover during operation in order to preserve the display from harm.

❶



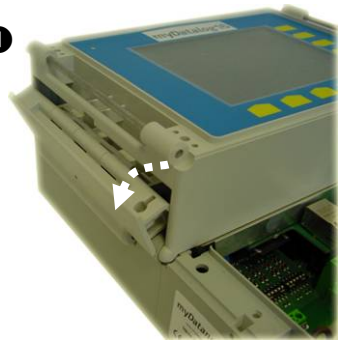
❷

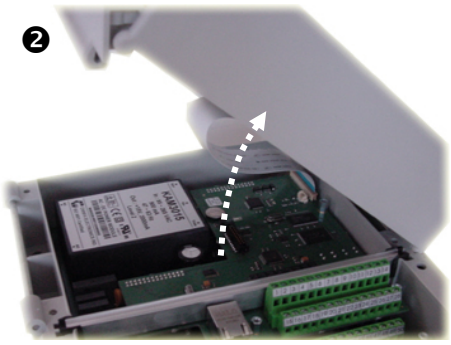


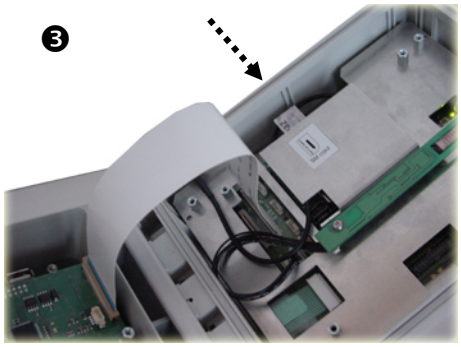
00.70 Installing A SIM

0. If you want to change the SIM card during operation, you have to select the menu item *Change SIM* first! **Otherwise the modem might be damaged!**
1. Open the closure using a screwdriver or something suitable.
2. Lift up the head carefully as shown above.
3. Insert the SIM card and take care of a proper fit (push-push system). Don't forget to configure the SIM using the *GPRS Settings* menu.

The SIM has to be ready for GPRS transmission!
If you deploy the instrument abroad, roaming has to be activated.
Be carefully before choosing a provider/product.

1 

2 

3 

00.80 Installing a MMC/SD Card

0. Disconnect the power supply and then screw off the cover of the connection chamber.
1. Insert the memory card (contact side top wards) and take care of a proper fit (push-push system).

If you want to change the user profile, turn the instrument off, exchange the memory card and turn the ***Unitrans*** on again. In this case the settings are taken from the new card.

1 

The MMC/SD card must not be swapped while the instrument is powered!

The MMC/SD card must not be quick formated.

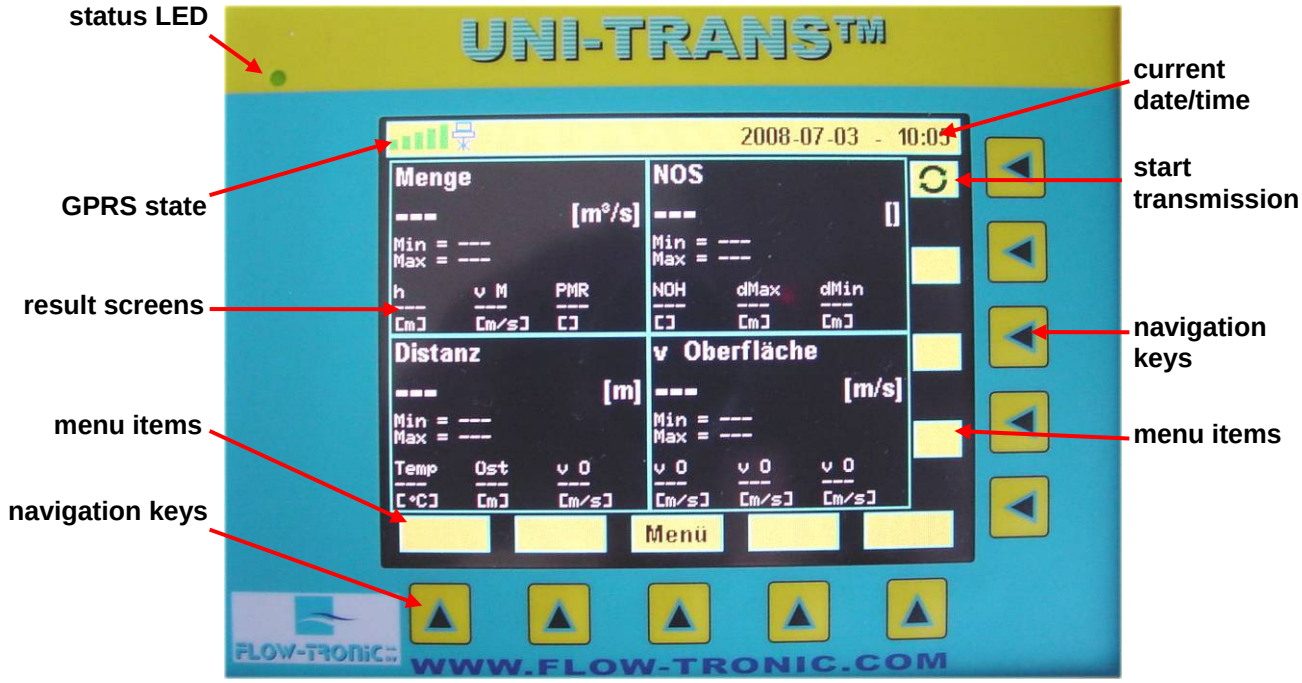
10 Operation

10.10 Main Screen

10.10.10 Overview

Immediately after powering the ***Unitrans*** a splash screen is shown and the status LED blinks once a second. You will be forwarded to the *main screen* after this process.

In order to work with the *main screen* you have to lift off the protective cover first. Refer to 00.60 OPENING/REMOVING THE PROTECTIVE COVER.



The display is automatically turned off after reaching 65°C inside the casing. The LED is blinking during this term. At 60°C or a key action the display is turned on again.

The navigation keys always refer to the very next menu item. The blank menu items do not have any function.

After pressing *start transmission* a GPRS connection is being established.



If you are in need of a higher user level you have to press the key button. The user level is automatically reset after 10 minutes without key action. After entering the password you have to close and reenter the current menu item in order to refresh the menu structure.

In order to confirm an entry press *OK*. Press *ESC* in order to leave a menu.





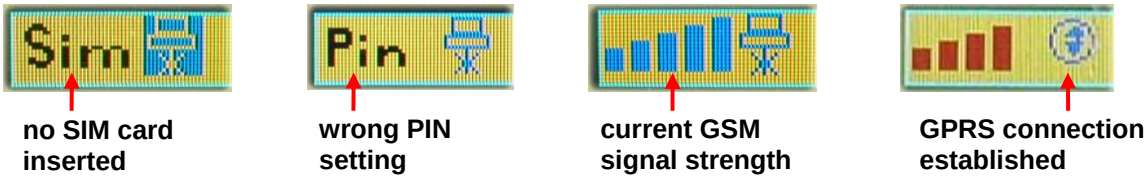
10.10.20 GPRS State

If you have to reconfigure or change your SIM card, please refer to 00.70 INSTALLING A SIM.

A blinking background of the GPRS field indicates that no GSM network is available or the status is yet unknown.

Signal strength indicator details...

bars	color	quality
1	red	poor signal strength
2..3	blue	sufficient signal strength
4..5	green	good signal strength

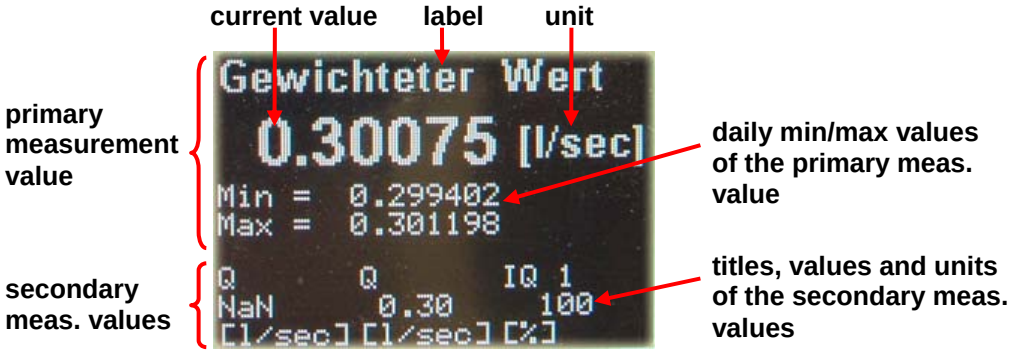


no SIM card inserted | **wrong PIN setting** | **current GSM signal strength** | **GPRS connection established**

10.10.30 Result Screens

The contents of the 4 available result screens can be configured in the menu. For further information refer to 20.10 MENU OVERVIEW.

In case of an alert, the according result screen will immediately be coloured red. As soon as the alert is reset the screen's background will be coloured black again. For further information about the configuration of alerts refer to 20 CONFIGURATION.



10.20 Putting Into Operation

Refer to 20 CONFIGURATION and 30 WIRING.

Study the wiring examples before wiring and deploying a unit!

❶ Configure the interfaces.
❷ Configure the sensors – keep eye on an advantageous sequence.
❸ Configure the result screens.
❹ Configure the record channels.
❺ Configure the GPRS settings.
❻ Turn the ***Unitrans*** off and make the wiring.
❼ Turn the ***Unitrans*** on and activate transmission and measuring.
❽ Check the measurement values on the result screens and on ***myDataweb***.

10.30 Troubleshooting

Eventually write down some notes of occurred troubles and the according answers to the problems during the wiring, configuring,...

Please make a brief drawing of the connected components and wiring. This will help you, if you have to comprehend or modify the measuring system later on!

❶ Study your site specific notes first.
❷ Check the wiring and settings.
❸ Contact the 1st level support.
❹ Contact the 2nd level support.

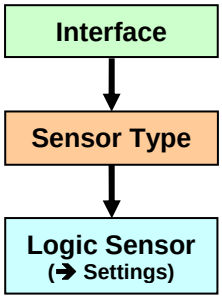
20 Configuration

Refer to 10.10 MAIN SCREEN in order to learn about the basic handling of the operation elements.

Remember to call the *password entry* before modifying settings.

The *interface* setting determinates which sensor type you have connected to the particular input.

The *logic sensor* accomodates a sensor's settings and measurement values.



20.10 Menu Overview

Profile	
Profiles: [...]	current user profile
Reset Profile	If the profile settings are reset, all configurations are set to initial values and the measurement values are deleted.
Basic settings	
Language	display language
Date/Time	current Date/Time of the instrument
Day change over	time, when the counters and daily min/max values are reset
GPRS settings	
SIM tariff	only for information
Overrule tariff	in order to apply a SIM different from the above setting; not necessary when using *External SIM*
PIN code	PIN code of the installed SIM card
Select provider	provider of the installed SIM card
Configure network	*MCC* and *MNC* setting in order to lock the SIM to a specific network
Change SIM card	has to be confirmed before replacing/installing a SIM card during operation. Otherwise the modem might be damaged!
Save	Save the configuration of the ***Unitrans*** on the MMC card.
Displaye Settings	
Standby	activates the economizing mode
Turnoff Delay	display standby after a user-defined time-span
Interface and com. ports settings	
RS485	
RS485 1...4: [...]	allocation with the connected sensor type
Analog In	
Analog In 1...8: [...]	see above
Digital in	
Digital In 1...8: [...]	see above
HART	
HART Addr. 1...6: [...]	only for information
Search for HART sensors	Perform an automatic search for sensors on the HART bus.
Sensor settings	
Log. Sensor 1...36 konfigurieren	
Sensor 1...12: [...]	
Allocated sensor: [...]	Allocate a logical sensor to the selected item. If you want to change the sensor type, first confirm *Kein Sensor*. Otherwise only compatible sensor types are listed.
Sensor setup	Modify the sensor's settings. For further information refer to 20.20 DETAILED SENSOR SETTINGS chapter.
Alarm setup	*Alarmwert* is the trigger value for an alert. The alert is deactivated when the measurement value reaches *Alarmwert+Schwellwert*.
Change description	change sensor's title

Unitrans

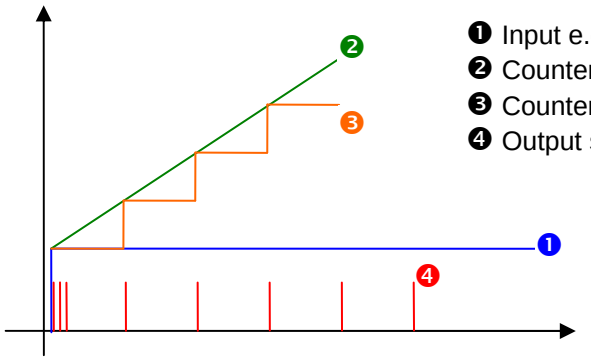
Output settings

Digital Out

Digital Out 1...4

Log. Sensor: [...]	Allocate a logic sensor to the selected output.
Measurement value: [...]	The logic sensor's measurement channel which is forwarded to the selected output.
Mode: [...]	In *Limiting Value* mode the output is set to 1 during an alarm condition, otherwise it's set to 0. In *Impuls Mode* the output provide counter impulses in specific steps.
Pulse weight: [...]	each *x* is counted with one impulse
Pulse width: [...]	length of one impulse

Pulse Output Graph...



❶ Input e.g. "Flow" [m³/h]
❷ Counter (time/area) [m³]
❸ Counter result with 1 pulse/m³
❹ Output signal (100ms per pulse)

Analog Out

Analog Out 1...4

Log. Sensor: [...]	Allocate a logic sensor to the selected output.
Measurement value: [...]	The measurement value which is forwarded to the selected output.
Alarm: [...]	Output provides failure value during alarm condition if activated.
Alarm mode: [...]	During a faulty condition the output is set to *x mA*.
Time constant: [...]	determinates the response time to the processed data
Low scale: [...]	value according to 4 mA
High scale: [...]	value according to 20 mA

Data aquisition settings

Transmission: [...]	Turn the periodic GPRS transmission *on*/*off*. An additional transmission is started when the setting is changed to *on*.
Recording: [...]	Turn the measuring *on*/*off*.
Dispersion value: [...]	If a measurement value differs more then *x %* from the previous value, an additional measuring is triggered (*0%* ➔ triggering off).
Logging interval	period for the measuring
Transmission interval	period for the GPRS transmission

Channel setup

Log channel 1...16

Log. Sensor: [...]	Allocate a logic sensor to the selected record channel.
Meas. value: [...]	Allocate a particular measurement channel to the selected record.
Rec. unit: [...]	unit of the allocated measurement channel
Alarm: [...]	Q is being calculated and stored as soon as an alarm occurs if this setting is *on*.
Change description	Change the measurement channel's title.

Display settings
- Display style: [...] — only for information
- **Display window 1...4 setup**
  - **Main display, Subdisplay 1...3**
    - Log. Sensor: [...] — Allocate a logic sensor to the selected display area.
    - Meas. value: [...] — Allocate a particular measurement channel to the display area.
    - Display unit: [...] — unit of the allocated measurement channel
    - Alarm: [...] — Screen reacts to an alarm condition if activated.

System info
- **Instrument info**
  - [...] — only for information
- Site description — only for information

20.20 Detailed Sensor Settings

20.20.10 *FLO-DAR* Sensor

Sensor type: [...] — *Standard*, *Long Range* (LR), *Externe Höhe*, *h-Module (Std.)*, *h-Module (LR)*, *Ext. v (Std)*, *Ext. v (LR)*, *h-Mod. (Std, v)* or *h-Mod. (LR, v)*

Channel shape: [...] — profile of the canal

Parameter
- Sensor offset [...] — distance between sensor and base of the canal
- Sediment level [...] — height of the sediment within the canal
- Cal. table [...] — type of calibration table which is applied to the measurement values
- Mounting direction [...] — mounting direction of the sensor
- PMR Min...Max [...] — velocity depending quality parameters
- NOS Min [...] — velocity depending quality parameters
- NOH Max [...] — height depending quality parameter
- NOL [...] — Measurement value is held for *x cycles* when at least one quality parameter exceeds the limit.

...Circular Profile...
- Diameter: [...] — diameter of the canal

...Rectangular Profile...
- Width: [...] — width of the canal

...Special Profile...
- Tbl. level/profile — table with the area at particular heights
- Erase table — Reset the profile table.

calibration table
- Tbl. avg. v/surf. v — Flow rate is corrected correlating to specific velocities.
- Tbl. avg. v/level — Flow rate is corrected correlating to specific heights.
- Tbl. level/profile — profile table when having a *Special Profile*
- Erase table — Reset one (or more) of the calibration tables.

Median Filter
- Level filter-depth: [...] — filter-depth of the level-depending median-filter
- v AVG filter-depth: [...] — filter-depth of the velocity-depending median-filter

The filter-table obeys the first-in-first-out principle and is not reset during the operation. Therefore if more then the half of the readings are bad, the result becomes bad.

...Sensortype *External Height*...

External level
- Log. Sensor: [...] — Allocate a logic sensor to the external height sensor.
- Meas. value: [...] — Allocate a particular measurement channel to the selected height sensor.
- Unit: [...] — unit of the allocated measurement channel

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...Sensortype *External Velocity*...

External velocity

Log. Sensor: [...]	Allocate a logic sensor to the external velocity sensor.
Meas. value: [...]	Allocate a particular measurement channel to the selected height sensor.
Unit: [...]	unit of the allocated measurement channel

...Sensortype *h-Module (Std...LR)*...

h-Module setup

Primary sensor: [...]	primary height sensor
Prim. sens. from: [...]	primary sensor range's start
Prim. sens. until: [...]	Height where the measuring is switched to the secondary sensor. The secondary sensor is calibrated automatically with the primary sensor's last measurement value.
Max. offset diff.: [...]	If the primary sensor differs more then *x %* from the secondary sensor's last measurement value, the measuring is invalid. This setting is applied when the measuring is switched back to the primary sensor.

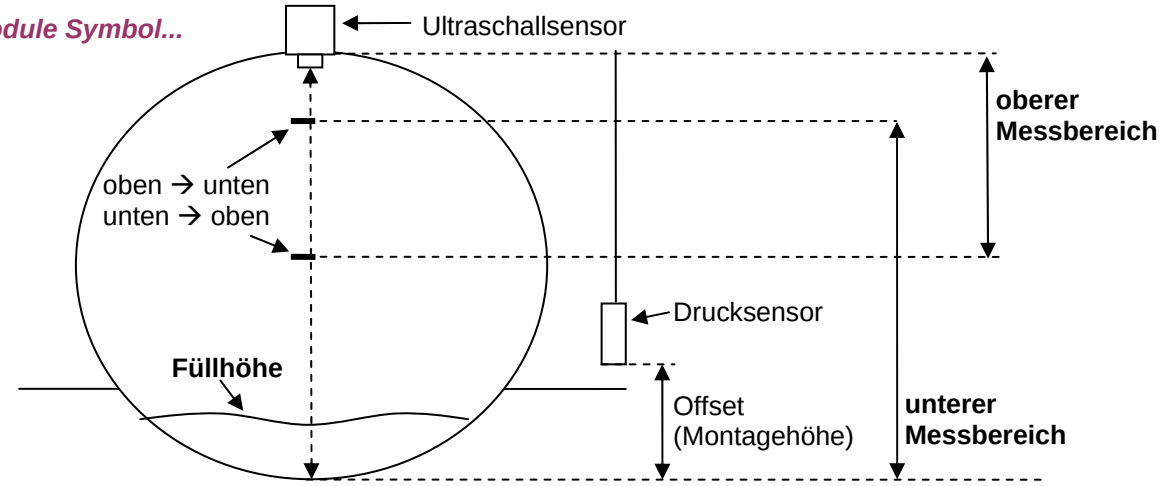
Display primary input

[...]	only for information

Secondary input setup

Log. Sensor: [...]	Allocate a logic sensor to the secondary height sensor.
Meas. value: [...]	Allocate a particular measurement channel to the selected height sensor.
Unit: [...]	unit of the allocated measurement channel

h-Module Symbol...



20.20.20 Ultra Sonic Sensor

Path(s) layout: [...]	Select which sensor paths provide crossed measurements.

JBus addresses

Paths 1u.2...3u.4	bus addresses of the ***FLO-SONIC*** stations

Channel parameters

Channel shape: [...]	profile of the canal
Sediment level: [...]	height of the sediment within the canal
Import settings	Import the settings from a specific ***FLO-DAR***.
...Canal Profile *Circular Profile*...	
Diameter: [...]	diameter of the canal
...Canal Profile *Rectangular Profile*...	
Width: [...]	width of the canal
...Canal Profile *Special Profile*...	
Tbl. level/area	table with the area at particular heights
Erase table	Reset the profile table.

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Sample Layers

Sample Layer 1...4

Path level: [...]	*active* or *inactive*
I.Q. Min: [...]	quality parameter
Hold time: [...]	Measurement value is held for *x sec* when the quality parameter exceeds the limit.
Start level: [...]	height of the sensor range's start (h_s)
Install.level: [...]	height of the sensor's installation height (h_I)
Transition level: [...]	height of the transition range's start (h_U)
End level: [...]	height of the transition range's end (h_E)

Values have to be entered ascending from the lowest measurement layer's start up to the highest layer's end. Aware to configure the velocity table for levels below layer 1.

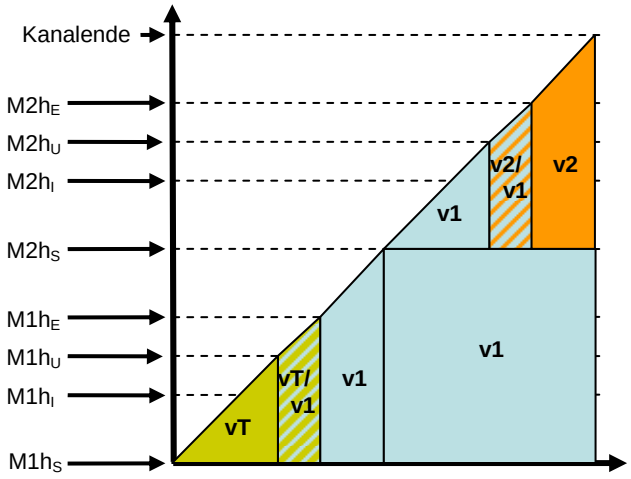
Correction tables

Reference table for Q	Q is corrected correlating to specific heights.
Erase reference table	Reset the calibration table.
Velocity table under path 1	Velocity of measurement layer 1 is corrected correlating to specific heights.
Erase velocity table	Reset the calibration table.

Level input

Log. Sensor: [...]	source sensor of the level
Meas. value: [...]	measurement channel of the level
Display unit: [...]	unit of the level

Sample Layers...



20.20.30 Analogue Sensor

Sensor type: [...]	*Analogue Sensor* or *h Module*
Phys. meas.: [...]	type of the measurement value (e.g. *Height*)
Unit: [...]	unit of the measurement value
Mode: [...]	*0-20mA* or *4-20mA*
Low scale: [...]	value according to 0/4 mA
High scale: [...]	value according to 20 mA

20.20.40 Digital Sensor

Mode: [...]	*Normal* or *Inverted*

20.20.50 Calculation

Modul type: [...]	*Deactivated*, *Totalizer, Average* or *Weighting*
...Totalizer...	
Log. Sensor: [...]	Allocate a logic sensor to the selected item.
Meas. value: [...]	Allocate a particular measurement channel to the selected item.
Unit: [...]	unit of the allocated measurement channel
Counter Direction: [...]	*upwards* or *downwards*
Totalizer type: [...]	reset period of the counter
Totalizer mode: [...]	Convert a time based value into a not time based one.
...Average...	
Output unit: [...]	unit of the calculated value
Measurement value 1...4	
Log. Sensor: [...]	Allocate a logic sensor to the selected item.
Meas. value: [...]	Allocate a particular measurement channel to the selected item.
Weighting: [...]	emphasis of the measurement channel
...Weighting...	
Output unit: [...]	Unit of the output value.
Messwert 1...2	
Log. Sensor: [...]	Allocate a logic sensor to the selected item.
Meas. value: [...]	Allocate a particular measurement channel to the selected item.
Weighting: [...]	Weighting of the measurement channel.
Reference input: [...]	
Log. Sensor: [...]	Allocate a logic sensor to the selected item.
Meas. value: [...]	Allocate a particular measurement channel to the selected item.
Unit: [...]	unit of the allocated measurement channel
Tables: […]	
Weight table: […]	Table with the weighting between the measuring value 1 and measuring value 2
Erase weight table: […]	Reset the weigth table
Reference table: […]	Measurement Value is corrected according to the reference input.
Erase reference table: […]	Reset the reference table.

20.20.60 Example Multiplication

Channel1: any measurement or calculated channel
Channel2: any measurement or calculated channel

The result of the multiplication of channel 1 and 2 is ***Channel3***.

Channel3: Calculation/Weighting
Meas. Channel1: Channel1
Meas. Channel2: Channel1
Reference Input: Channel2
Weighting table…
0 100
10000 100
Reference table…
0 0
10000 10000 (*factor)

30 Wiring

30.10 Connection Chamber

30.10.10 Terminal Box HW 1.0



Take care of proper wiring!
Disconnect the power supply before wiring!

Abbreviations...
NC ..... Normally Closed
NO ..... Normally Opened
C ..... Common Terminal
GND ..... Ground
PSU ..... Power Supply Unit

Digital Inputs								Digital Outputs					
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1+	**2+**	**3+**	**4+**	**5+**	**6+**	**7+**	**8+**	**1NC**	**1NO**	**2C**	**3NC**	**3NO**	**4C**
15	16	17	18	19	20	21	22	23	24	25	26	27	28
1-	**2-**	**3-**	**4-**	**5-**	**6-**	**7-**	**8-**	**1C**	**2NC**	**2NO**	**3C**	**4NC**	**4NO**

Details...
Refer to 20 CONFIGURATION for the different operation modes.
Digitalinput: >=19V ⇨ high

RS 485				CAN		HART	PSU 1	PSU 2	PSU 3
29	30	31	32	33	34	35	36	37	38
A1	**A2**	**A3**	**A4**	**H**	**GND**	**2**	**+12V**	**+12V**	**+12V**
54	55	56	57	58	59	60	61	62	63
B1	**B2**	**B3**	**B4**	**L**	**1**	**-12V**	**GND**	**GND**	

Details...
RS 485 ..... protocol on request
CAN ..... *optional*
HART ..... *optional* ; built in 24V power supply on PIN 59
PSU 1 ..... isolated power supply with 12V, -12V or 24V output
PSU 2 ..... switchable power supply
PSU 3 ..... connector for a lead acid battery in order to secure an uninterruptible power supply

Analogue Outputs				Analogue Inputs							
39	40	41	42	43	44	45	46	47	48	49	50
1+	**2+**	**3+**	**4-**	**1+**	**2+**	**3+**	**4+**	**5+**	**6+**	**7+**	**8+**
64	65	66	67	68	69	70	71	72	73	74	75
1-	**2-**	**3-**	**4+**	**1..8-**							

Details...
out 1..3 ..... passive
out 4 ..... built in 24V power supply

The analogue outputs provide initially 4mA until they are updated by the ***Unitrans***. After the sample loop was opened, the analogue outputs will provide 4mA again when the circuit is closed again.

30.10.20 Terminal Box HW 2.0

Take care of proper wiring!
Disconnect the power supply before wiring!



Abbreviations...

NC ..... Normally Closed
NO ..... Normally Opened
C ..... Common Terminal
GND ..... Ground
PSU ..... Power Supply Unit

Digital Inputs								Digital Outputs					
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1+	**2+**	**3+**	**4+**	**5+**	**6+**	**7+**	**8+**	**1NC**	**1NO**	**2C**	**3NC**	**3NO**	**4C**
15	16	17	18	19	20	21	22	23	24	25	26	27	28
1-	**2-**	**3-**	**4-**	**5-**	**6-**	**7-**	**8-**	**1C**	**2NC**	**2NO**	**3C**	**4NC**	**4NO**

Details...

Refer to 20 CONFIGURATION for the different operation modes.
Digitalinput: >=19V ⇨ high

RS 485				CAN		HART	PSU 1	PSU 2	PSU 3
29	30	31	32	33	34	35	36	37	38
A1	**A2**	**A3**	**A4**	**H**	**GND**	**2**	**+24V**	**+12V**	**+12V**
54	55	56	57	58	59	60	61	62	63
B1	**B2**	**B3**	**B4**	**L**	**1**	**GND**	**GND**	**GND**	

Details...

RS 485 ..... protocol on request
CAN ..... *optional*
HART ..... *optional* ; built in 24V power supply on PIN 59
PSU 1 ..... isolated power supply with 24V output
PSU 2 ..... switchable power supply
PSU 3 ..... connector for a lead acid battery in order to secure an uninterruptible power supply

Analogue Outputs				Analogue Inputs							
39	40	41	42	43	44	45	46	47	48	49	50
1+	**2+**	**3+**	**4+**	**1+**	**2+**	**3+**	**4+**	**5+**	**6+**	**7+**	**8+**
64	65	66	67	68	69	70	71	72	73	74	75
1-	**2-**	**3-**	**4-**	**1..8-**							

Details...

out 1..3 ..... passive
out 4 ..... built in 24V power supply

The analogue outputs provide initially 4mA until they are updated by the ***Unitrans***. After the sample loop was opened, the analogue outputs will provide 4mA again when the circuit is closed again.

30.10.30 RS485 Terminierung

RS485 Termination Left							RS 485 Termination Right					
6	5	4	3	2	1		6	5	4	3	2	1
1PD	**1PU**	**1T**	**2PD**	**2PU**	**2T**		**3PD**	**3PU**	**3T**	**4PD**	**4PU**	**4T**

Abbreviations...
T ..... Termination Resistor
PU ..... Pull Up Resistor auf *RS485 A*
PD ..... Pull Down Resistor auf *RS485 B*

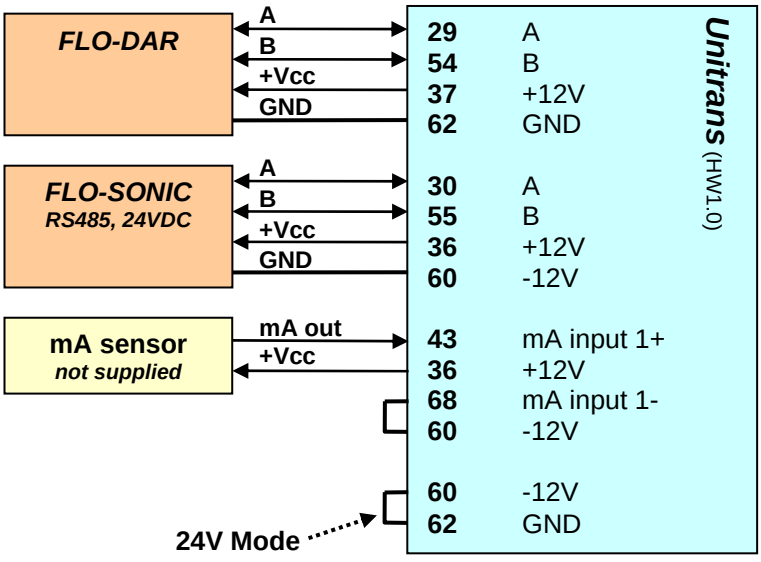
30.20 Wiring Examples

30.20.10 *Example 1*

The requirements are 1x ***FLO-DAR***, 1x ***FLO-SONIC*** and 1x analogue height sensor.

Sensor	***Interface***	***Sensor Type***	***Logic Sensor***
FLO-DAR	*RS 485 1*	*FLO-DAR 1*	*Sensor 1*
FLO-SONIC	*RS 485 2*	*Ultra Sonic 1*	*Sensor 2*
height sensor	*Analogue In 1*	*Analogue Sensor 1*	*Sensor 3*

❶ Configure the interfaces.
❶ Configure the analogue height sensor.
❷ Configure the ***FLO-DAR*** – analogue sensor for external height can be allocated, because it has already been created in step ❶.
❸ Configure the ***FLO-SONIC*** – profile settings can be imported from the ***FLO-DAR***, because it has already been configured in step ❷.
❹ Configure the result screens of ***Unitrans***.
❺ Configure the record channels.
❻ Configure the GPRS settings.
❼ Turn the ***Unitrans*** off and make the wiring.
❽ Turn the ***Unitrans*** on and activate transmission and measuring.
❾ Check the measurement values on the result screens and on ***myDataweb***.

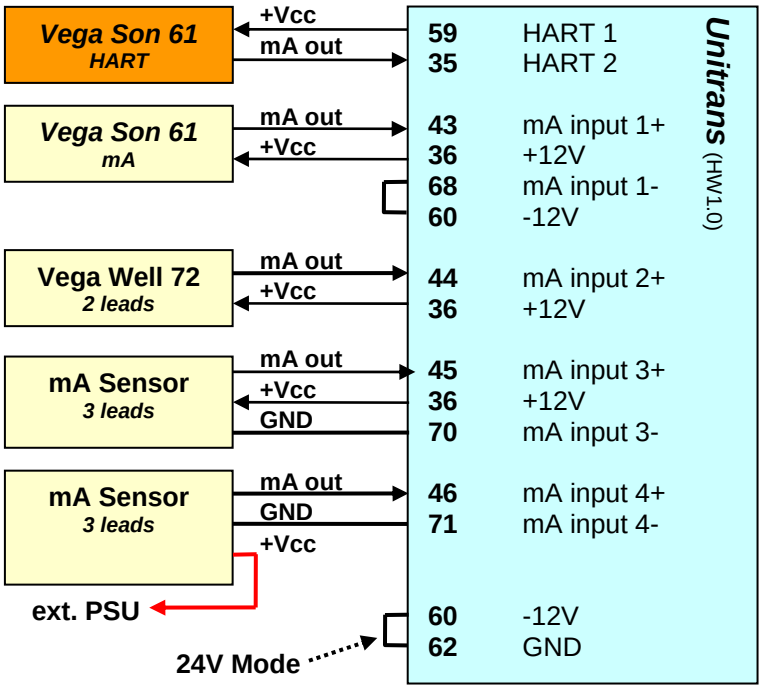


30.20.20 *Example 2*

The requirements are 1x ***Vega Son*** ultrasonic sensor in HART mode, 1x ***Vega Son*** ultrasonic sensor in mA mode, 1x ***Vega Well 72*** pressure sensor, 1x 3leads mA sensor and 1x external supplied 3leads mA sensor. The ***Unitrans*** has to supply the sensors with 24V additionally !

Sensor	*Miscellaneous*	*Interface*	*Sensor Type*	*Logic Sensor*
Vega Son 61	HART mode	*HART*	*HART Address 1*	*Sensor 1*
Vega Son 61	mA mode	*Analogue In 1*	*Analogue Sensor 1*	*Sensor 2*
Vega Well 72	2leads	*Analogue In 2*	*Analogue Sensor 2*	*Sensor 3*
analogue sensor	3leads	*Analogue In 3*	*Analogue Sensor 3*	*Sensor 4*
analogue sensor	3leads, ext. supplied	*Analogue In 4*	*Analogue Sensor 4*	*Sensor 5*

❶ Configure the interfaces – remember that you have to perform an automatic search for the HART sensor.
❷ Configure the sensors.
❸ Configure the result screens of ***Unitrans***.
❹ Configure the record channels.
❺ Configure the GPRS settings.
❻ Turn the ***Unitrans*** off and make the wiring.
❼ Turn the ***Unitrans*** on and activate transmission and measuring.
❽ Check the measurement values on the result screens and on ***myDataweb***.



30.20.30 *Example 3*

This example has to be understood as an additional illustration of the analog outputs. One passive and the active output are being used. Refer to the previous chapters for the additional wiring and commissioning.

