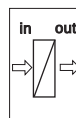
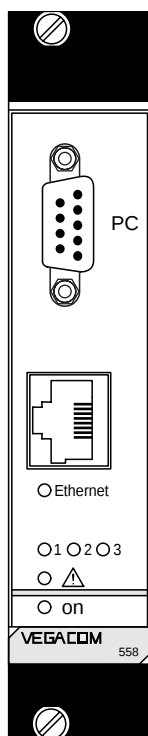


Operating Instructions

VEGACOM 558 Ethernet



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Safety information

Please read this manual carefully, and also take note of country-specific installation standards (e.g. the VDE regulations in Germany) as well as all prevailing safety regulations and accident prevention rules.

For safety and warranty reasons, any internal work on the instruments, apart from that involved in normal installation and electrical connection, must be carried out only by qualified VEGA personnel.



Note Ex area

Please note the attached safety instructions containing important information on installation and operation in Ex areas.

These safety instructions are part of the operating instructions and come with the Ex approved instruments.

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1 Product description

1.1 Function

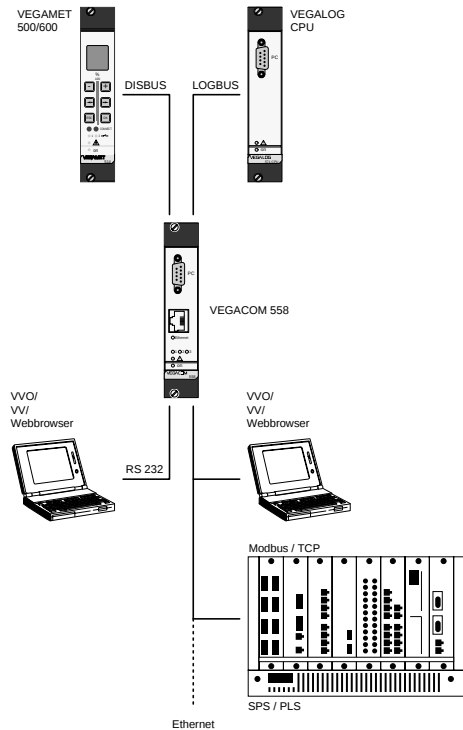
The VEGACOM 558 interface converter is used for conversion of VEGA-specific protocols of the DISBUS and LOGBUS into the TCP/IP protocol. It enables the connection of VEGA signal conditioning instruments VEGAMET series 500 and 600 and the VEGALOG 571 processing system, and through this, the connection of VEGA transmitters to an Ethernet network. When connecting signal conditioning instruments, the data of the VEGA protocol "DISBUS" are used, with the processing system, the VEGA protocol "LOGBUS" is used.

VEGACOM can be used as a web server, making the measured values of the connected VEGA instruments available in html format on the Ethernet. At the office level, the measured values of VEGA instruments can be displayed with an internet browser on each computer connected to the network. The data of VEGACOM 558 can also be called up via the WWW. Furthermore, it is possible to send emails containing measured values at predefined times and dates. For integration in process control or visualisation systems, VEGACOM 558 provides a Modbus / TCP server.

Network participants provided with the adjustment software VVO (VEGA Visual Operating) (e.g. service technicians) can adjust the VEGA instruments via Ethernet. With the visualisation software VV (Visual VEGA), it is also possible to access via network connection VEGACOM 558 and thus the measured values of the VEGA instruments.

Note:

To enable VEGALOG to work together with VEGACOM 558, the CPU card of VEGALOG must be equipped with the software version 1.30 or higher.



1.2 Configuration

VEGACOM 558 is designed in European size (5 TE width) and can be mounted into:

- carrier BGT596
- VEGALOG carrier BGT LOG571
- housing type 505.

The electrical connection to the power supply, DISBUS and LOGBUS is made with plug connectors. On the front plate of VEGACOM there are also:

- a nine-pole SUB-D plug (RS232) for direct connection to a PC with adjustment software VVO (VEGA Visual Operating) or the visualisation software VV (Visual VEGA)
- an RJ-45 connection for connection to an Ethernet network.

1.3 Technical data

Power supply

Operating voltage	U_{nom} = 24 V AC (20 ... 53 V), 50/60 Hz or = 24 V DC (20 ... 72 V)
Power consumption	approx. 4 VA
Fuse	1 A, slow-blow

Electrical connection

Component	multiple plug acc. to DIN 41 612, series F 48-pole (d, b, z) with coding holes
Module in carrier BGT 596 or BGT LOG571	suitable multipoint connector acc. to DIN 41 612 with connection via standard technologies
Housing type 505	via screw terminals max. 1 x 1.5 mm ²

Indicating elements

LEDs in front plate	
- on (green)	operating condition
- ! (red)	failure indication
- Ethernet (green/red)	status Ethernet (linked, TX, RX)
- 1 (green/red)	save indication
- 2 (green/red)	status LOGBUS
- 3 (green/red)	status DISBUS

Measured data input DISBUS

Data transmission	DISBUS (digital data transmission)
Connection cable	connection via 48-pole multipoint connector 2-wire standard cable (screened)
Max. cable length	1000 m

Measured data input LOGBUS

Data transmission	LOGBUS (digital data transmission)
Connection cable	connection via bus plug

RS 232 interface on front plate

Interface standard	RS 232C
Cable length	max. 15 m
Transmission rate in baud	9600, 19200, 38400, 57600
Transmission format	8 data bits, 1 stop bit, no parity
Plug in the front plate	SUB-D plug connector, 9-pole, pins

Ethernet interface on the front plate (mode 10BaseT)

Interface standard	Ethernet (IEEE802.3)
Line impedance	100 Ohm +/- 15 %
Cable type	Ethernet-Patch cable category 5 (STP)
Wire cross-section	0.2 mm ²
No. of wires	4
Max. transmission rate	10 Mbits/s
Coding	Manchester
Topology	star
Max. segment length	100 m
Plug version	8-pole RJ45 plug
Frame-Format	Ethernet Version 2

Ethernet interface on the front plate (mode 100BaseTX/Fast Ethernet)

Interface standard	Ethernet (IEEE802.3)
Line impedance	100 Ohm +/- 15 %
Cable type	Ethernet-Patch cable category 5 (STP)
Wire cross-section	0.2 mm ²
No. of wires	4
Max. transmission rate	100 Mbits/s
Coding	Manchester with 4B/5B procedure
Topology	star
Max. segment length	100 m
Plug version	8-pole RJ45 plug
Frame-Format	Ethernet Version 2

Electrical protective measures

Protection	
- not mounted	IP 00
- in carrier BGT596 or BGT LOG571	
- front side completely equipped	IP 40
- upper and lower side BGT596	IP 00
BGT LOG571	IP 20
- wiring side	IP 00
- in housing type 505	
- front side	IP 40
- other sides	IP 30
Protection class	II (in housing type 505)
Overvoltage category	II

Electrical separating measures

Reliable separation acc. to VDE 0106, part 1 between power supply, LOGBUS, DISBUS, RS 232 and Ethernet	
- reference voltage	250 V
- test voltage	2 kV

CE conformity

VEGACOM 558 meet the protective regulations of EMC taking the following standard into consideration:

Emission	EN 61 326: 1997/A1: 1998 (class A)
Susceptibility	EN 61 326: 1997/A1: 1998

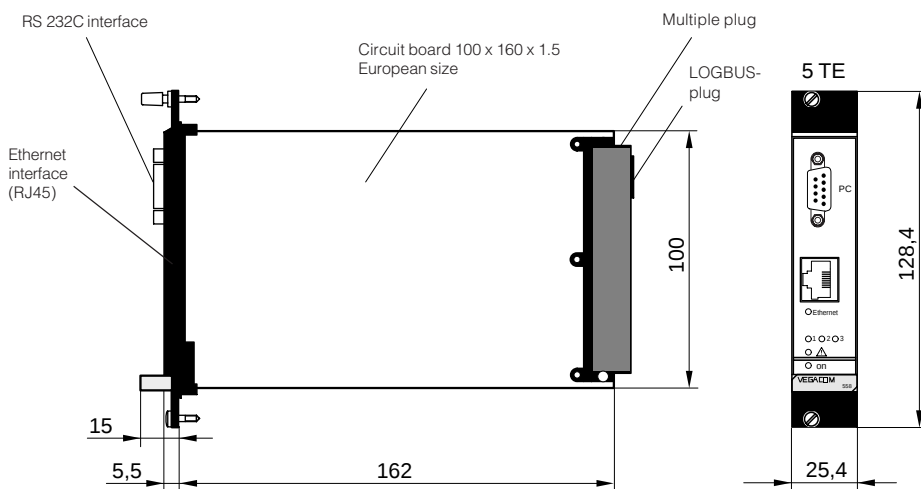
The protective regulations of the low voltage directive are fulfilled acc. to the EN standard
EN 61 010 - 1: 1993

Ambient conditions

Permissible ambient temperature	-20 °C ... +60 °C
Storage and transport temperature	-20 °C ... +85 °C

Mechanical data

Series	module unit for carrier BGT596, BGT LOG571 and housing type 505
Dimensions, not mounted	W = 25.4 mm (5 TE), H = 128.4 mm, D = 166 mm
Weight	approx. 550 g

1.4 Dimensions

2 Mounting

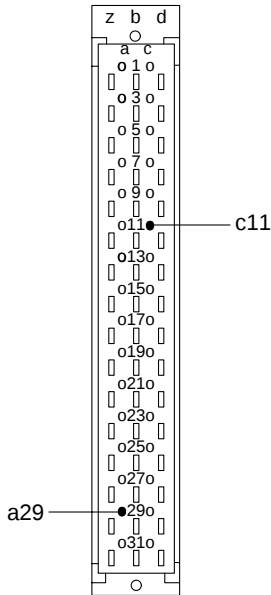
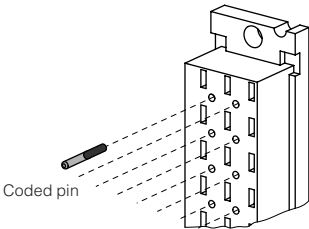
Coding

A mechanical coding system avoids later interchanging of various module cards in the carrier or in the housing type 505.

The coding system consists of:

- two coded pins in the multipoint connector
- two holes in the multiple plug of VEGACOM.

The coded pins are attached to the module (multipoint connector). The multipoint connector is equipped with the coded pins by the user according to the following illustrations.



Positioning of the coded pins on the multipoint connector

3 Electrical connection

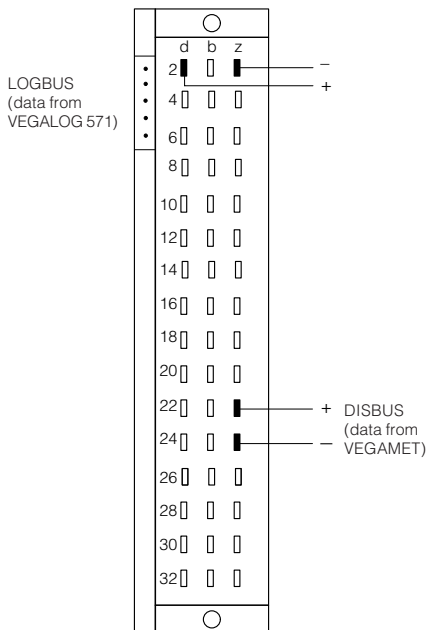
3.1 Connection instruction

Safety information – Qualified personnel

Instruments which are not operated with protective low voltage or DC voltage must only be connected by qualified personnel. This also applies to the configuration of measuring systems planned for Ex environment.

As a rule, do all connecting work in the complete absence of line voltage. Always switch off the power supply before you carry out connecting work. Protect yourself and the instruments.

3.2 Wiring plan

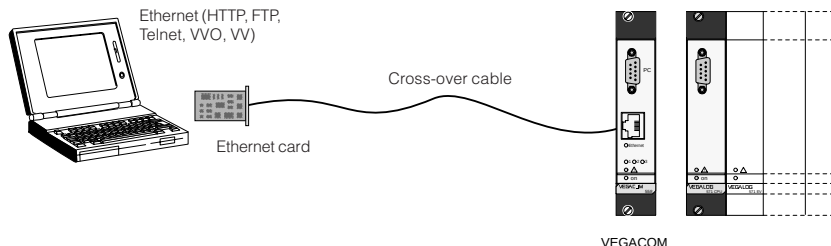
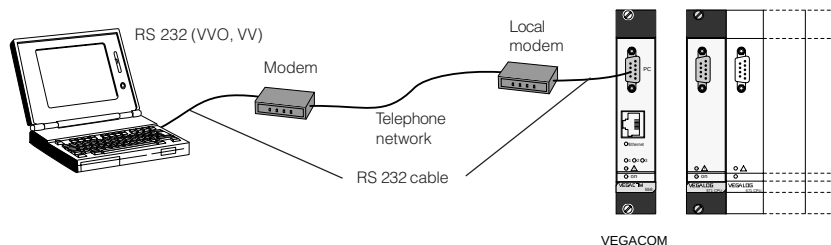
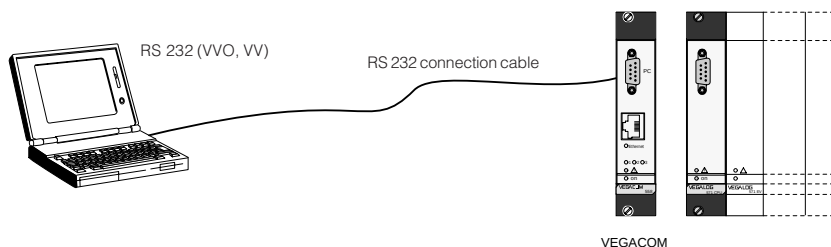


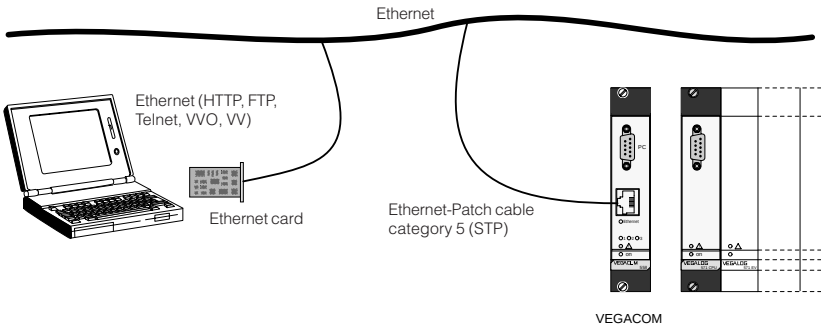
4 Communication with VEGACOM

4.1 Ways to connect

There are a number of ways to enable communication with VEGACOM 558:

- a direct standard connection with the PC (RS232)
- a standard connection via modems and telephone network with the PC (RS232)
- a connection via a network (Ethernet)
- a connection via internet





4.2 Adjustment software

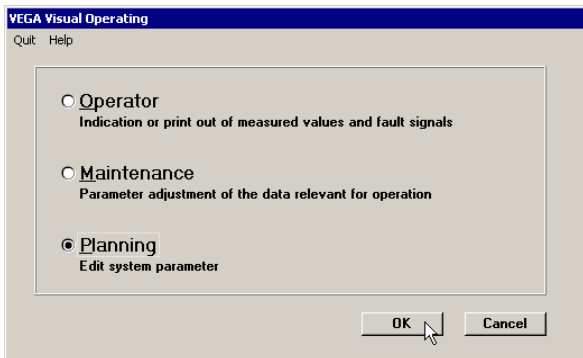
There are two ways to adjust VEGACOM 558 with the adjustment software VVO, either via the RS232 interface or via the Ethernet interface. In both cases, VVO version 2.80 or higher is necessary.

For settings on VEGACOM 558 relating to certain internet services (e.g. web server, Mail-Client, etc.), an internet browser, e.g. Internet Explorer or Netscape Communicator, must be used instead of VVO. Adjustment with an Internet browser, however, requires that VEGACOM 558 and the PC be connected via a network (Ethernet).

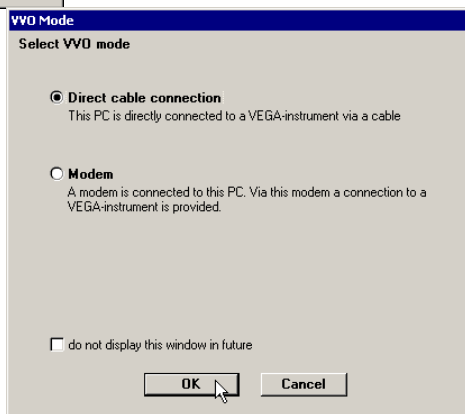
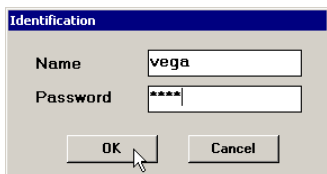
Software	Connection technology	Activities
VVO (VEGA Visual Operating) version 2.8 or higher	- standard (RS232) - Ethernet - modem connection	- complete configuration and parameter setting of the connected instruments with LOGBUS and DISBUS (VEGALOG and signal conditioning instruments) - provide Ethernet access - load html pages into VEGACOM
Internet browser or Netscape Communicator	- Ethernet	- configuration of Mail-Client, Web server, Diagnosis, ... - show html pages of VEGACOM - generate and send emails
Ping	- Ethernet	- diagnosis help (search and check network participants)

5 Configuration of VEGACOM 558

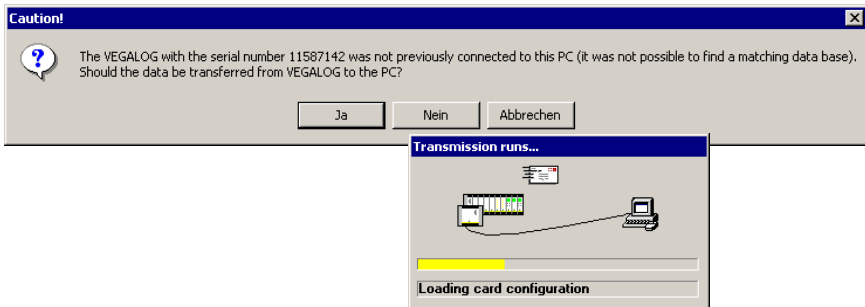
The configuration of the instrument is done with the adjustment software VVO (VEGA Visual Operating), version 2.8 or higher, and can be realised via the standard serial interface or Ethernet connection. Connect VEGACOM 558 to the PC (as described in chapter "4.1 Ways to connect"). Start VVO and choose **Planning**.



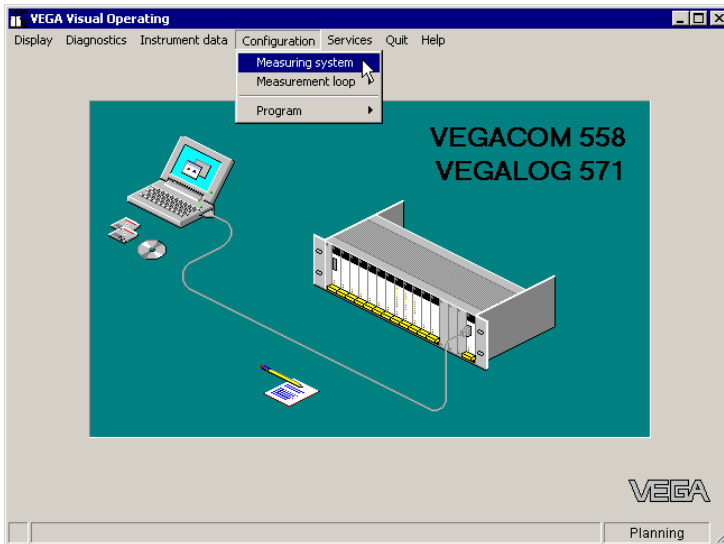
Enter in each of the following fields (name and password) **vega** and then choose mode **Direct cable connection**.



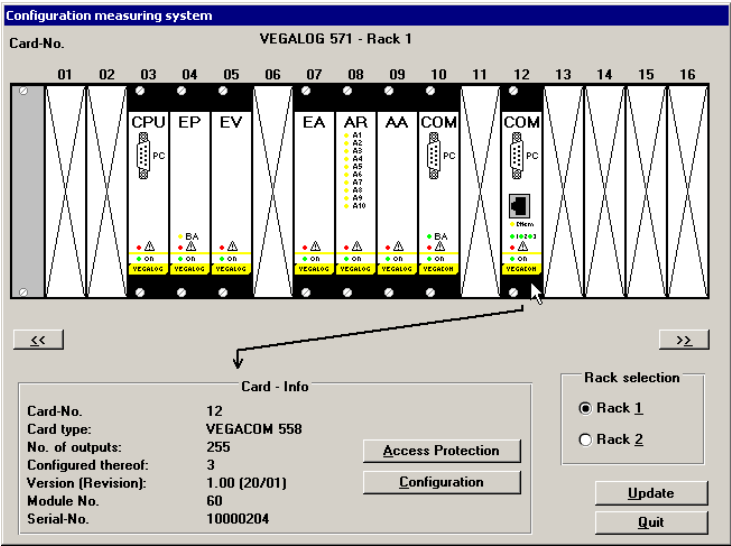
If necessary, confirm the following message (if VEGALOG or VEGAMET was already previously connected to VVO, another message appears) and wait until data transmission is finished.



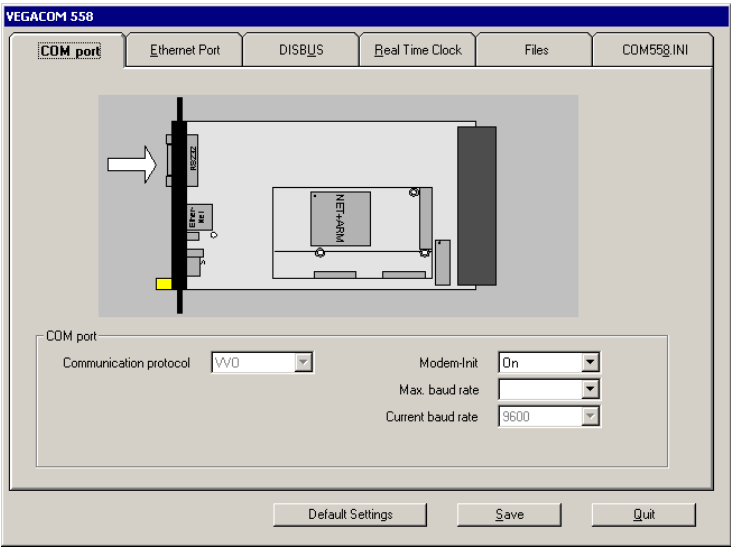
VVO now shows the connected instrument, in this case a VEGALOG with a VEGACOM 558 which is connected via the standard serial interface to the PC. Click to **Configuration** and to **Measuring system**.



Click in the following window to VEGACOM 558 and then the button **Configuration** (VEGACOM can, however, be located in other positions than shown here).

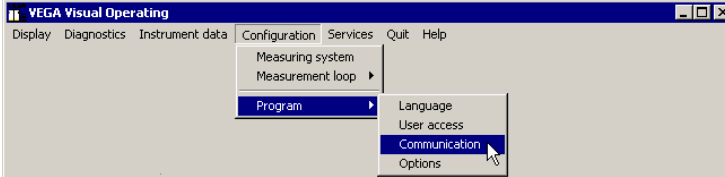


The following image shows the configuration window of VEGACOM 558. By clicking different registers, all parameters of VEGACOM 558 can be reached.



5.1 Adjust communication mode with VVO

During installation, VVO is set to "serial communication" (standard). For access via Ethernet to VEGACOM, VVO must be switched over. Click in the VVO main window to **Configuration > Program > Communication**.



Choose in the window "Communication" **TCP/IP**. VVO searches the network for existing VEGACOMs and enters the result (IP addresses) in the list box. Then the requested VEGACOM can be selected out of the list. If it is not found by VVO (because it is probably switched off or not already connected), the IP address must be entered manually. After confirmation with **OK**, VVO searches the network and makes a connection to the instrument.

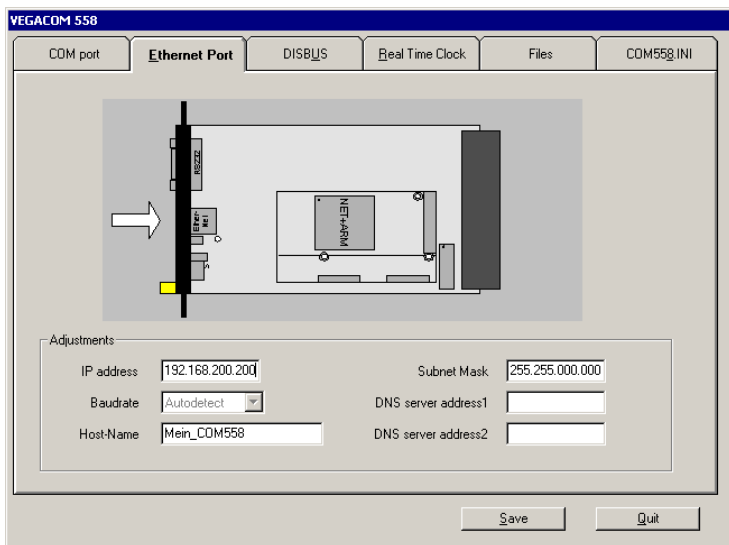


If a connection to a VEGACOM 558 (whose IP address has already been entered) should be made at a later time, you only have to select it from the list.

5.2 IP address

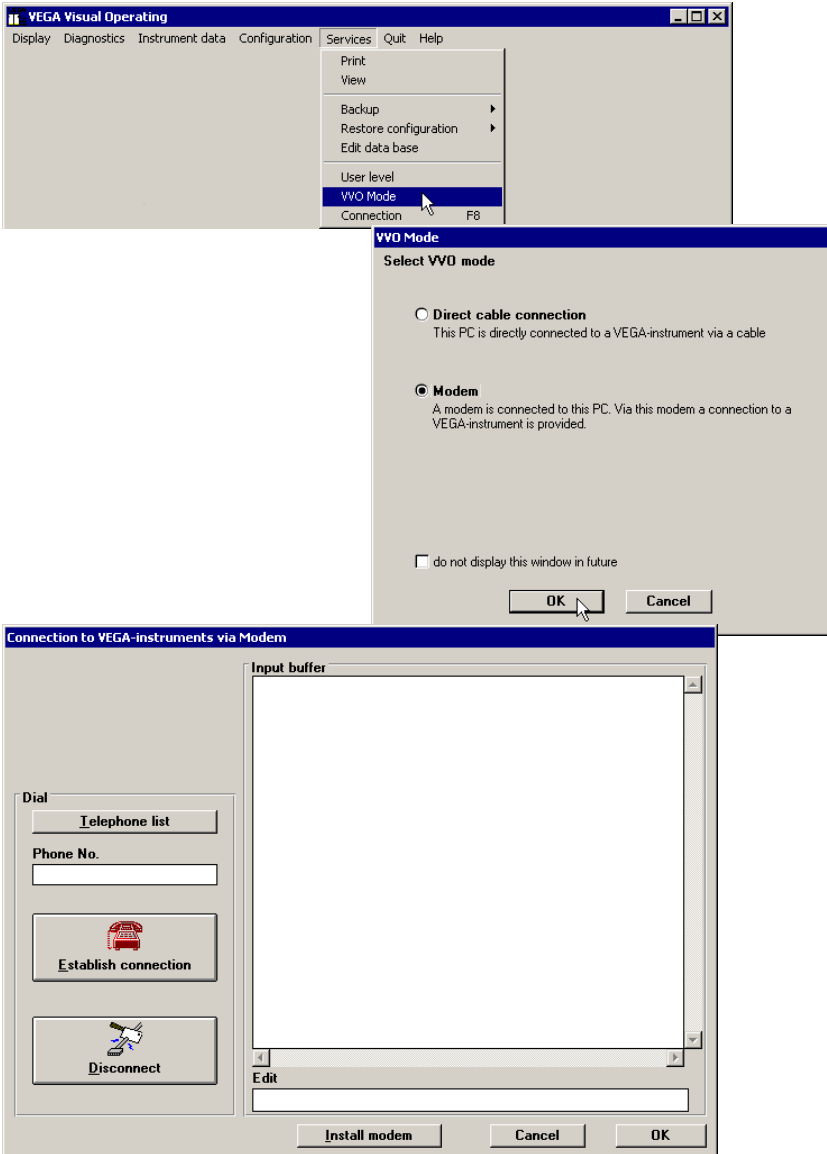
If the instrument is to be connected to the network, it must have an IP address for identification on the net. As default, VEGACOM 558 has IP address **192.168.200.200**.

Generally, the system administrator assigns a unique IP address for each network participant. To assign this address on VEGACOM 558, move to the configuration window of VEGACOM (here it doesn't matter if a serial or a network connection exists). There you click the register **Ethernet Port**. In the fields, you enter the IP address and a host name, if necessary also the subnet mask and DNS server addresses. Make sure that the host name does not contain special or blank characters. The baud rate can remain at Autodetect. Then you have to **Save**. With **Quit** (push twice) you return to the VVO main window.

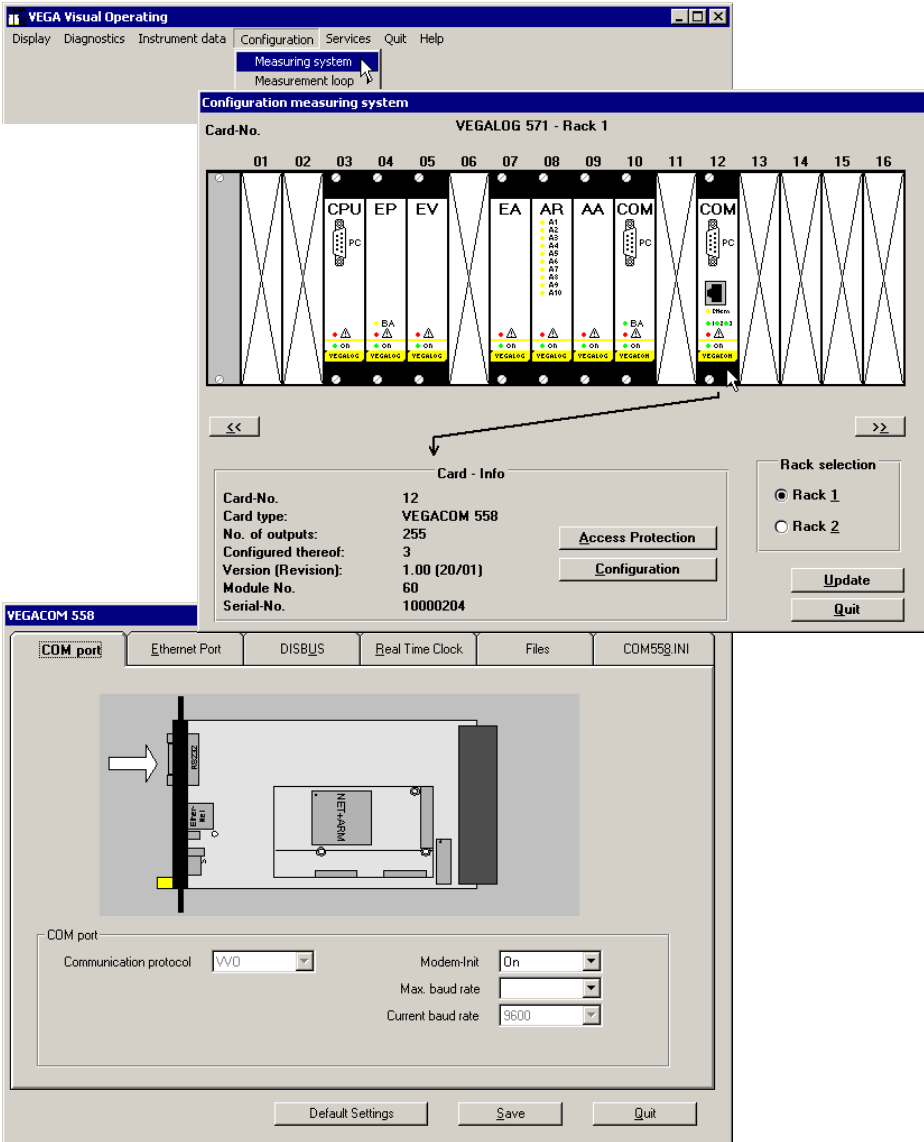


5.3 Connection via modem

If VEGACOM 558 is to be adjusted via modem, you have to adjust the mode **Modem** (as shown in the following three images).



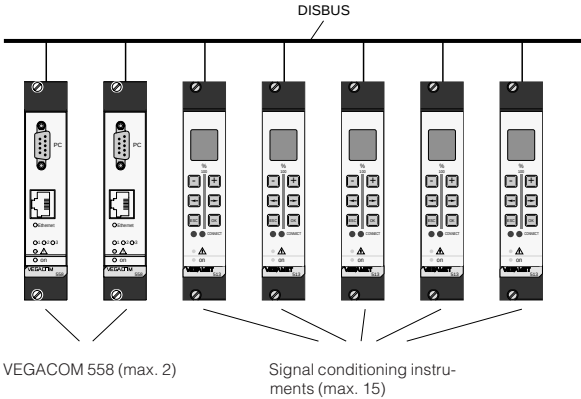
For modem operation, also note the settings in the configuration window of VEGACOM. As default, the modem initialisation is switched on and the baud rate is set to 9600. These settings relate to the local modem.



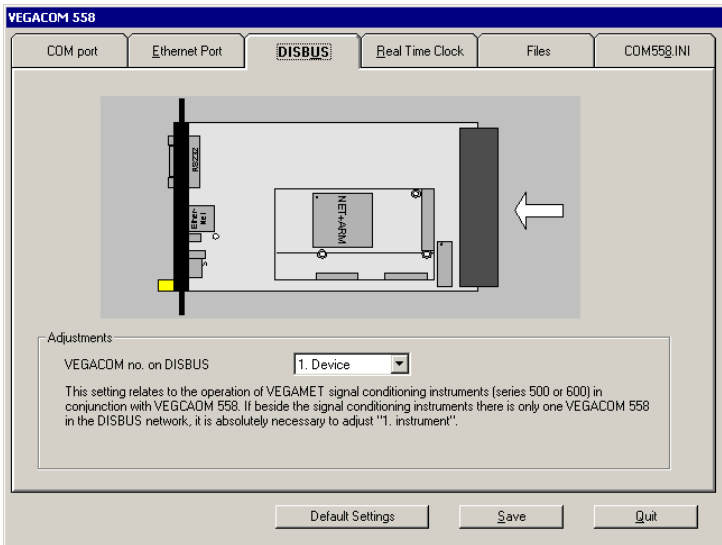
For detailed information on modem operation, see operating instructions "Remote parameter adjustment".

5.4 VEGACOM 558 on DISBUS

If VEGACOM 558 is operated in conjunction with VEGA signal conditioning instruments (e.g. VEGAMET 515, VEGAMET 614), it is a participant on the DISBUS. Max. 15 VEGAMETs can be connected to the DISBUS, in addition, two participants can be a VEGACOM 558.



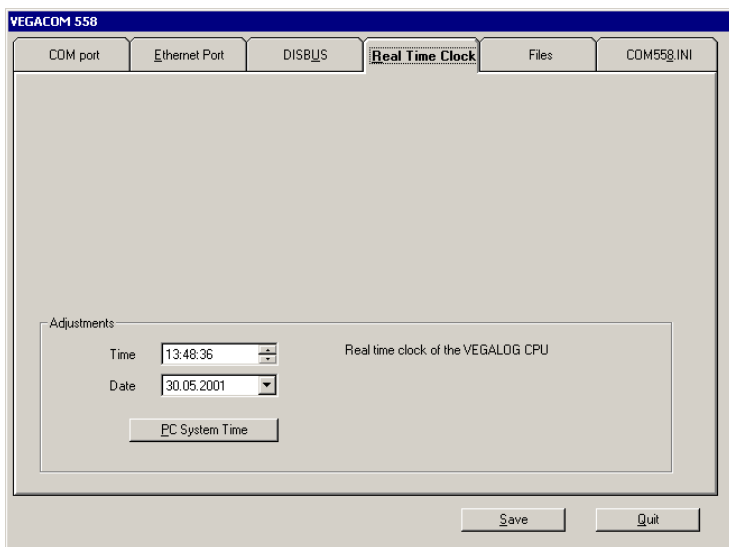
All DISBUS participants must be addressed (1 ... 15). On VEGACOM 558, this is done in the configuration window (**1. device** or **2. device**).



5.5 Real time clock

Since VEGACOM 558 can send time-controlled emails, the current time must be available. In the CPU card of VEGALOG 571 there is a battery-buffered real time clock which is used by VEGACOM. In the illustrated configuration window, you can set time and date manually or they can be transferred with the button **PC system time** from the PC to the RAM memory of the CPU card.

With **Save**, the time is permanently saved and and remains even in case of mains failure.

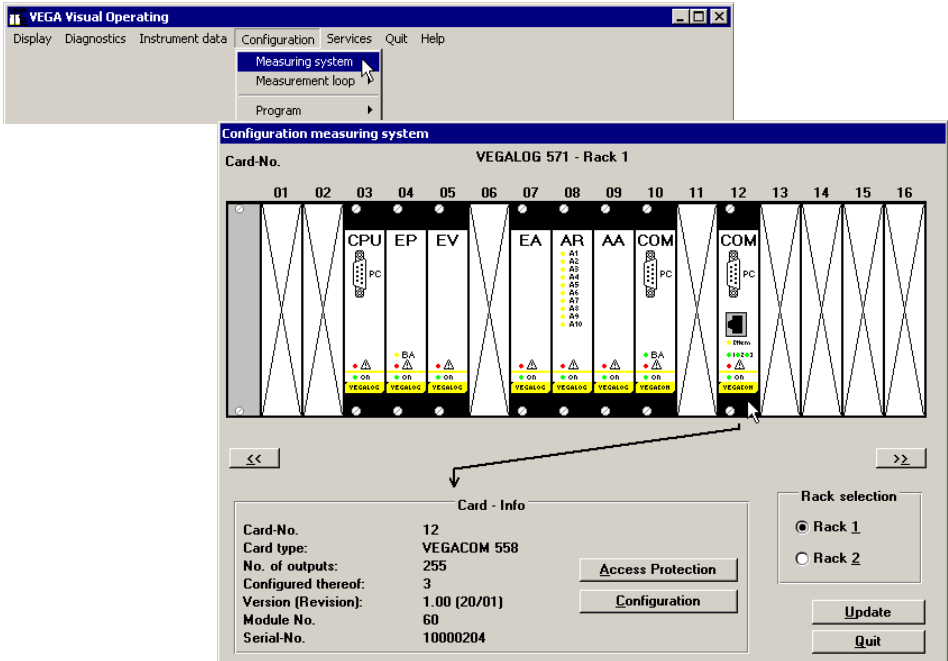


Note:

If VEGACOM 558 is used in conjunction with DISBUS, no buffered real time clock is available. After a supply interruption to VEGACOM, the time must be readjusted.

5.6 Activate password protection

To avoid unauthorised access to VEGACOM 558 and the connected processing systems VEGALOG or VEGAMET, they can be protected by a password. Especially when VEGACOM is adjusted via network and is therefore accessible to each network participant, it can be important to preclude unauthorised adjustment. Click to **Configuration** > **Measuring system**, in the window "Configuration Measuring system" you click to the **VEGACOM 558** and then to **Access protection**.



Configure access protection

Password protection

 ☐ Deactivated
☒ Activated

Password for VVO access
In future VEGA Visual Operating will only have access to this instrument if the password is entered whilst connecting.

Password for VV access
In future Visual VEGA will only have access to this instrument if the password is saved in Visual VEGA.

☒ Save passwords on PC

22

6 VEGACOM 558 as Modbus / TCP server

VEGACOM 558 collects measured values of the VEGAMET 513, 514, 515 and 614 signal conditioning instruments (via DISBUS) or VEGALOG 571 (via LOGBUS) and stores them temporarily for collection via MODBUS / TCP.

The way the measured values are stored in the temporary storage of VEGACOM 558 for the higher-priority processing system depends on the selected configuration. It depends on whether VEGACOM 558 is connected to DISBUS or LOGBUS. VEGACOM 558 follows the "Open MODBUS / TCP Specification" release 1.0 from Schneider Electric. This standard is supported by many process control systems, remote IO's, visualisation programs and OPC servers.

Note:

When connecting to DISBUS, the storage of measured values can be determined additionally via the HTML configuration page "General".

Beside the measured values, it is also possible to call up the status of the contact inputs and outputs via VEGACOM 558.

Call up of the measured values via:

- Function code 04 (= Read Input Registers)

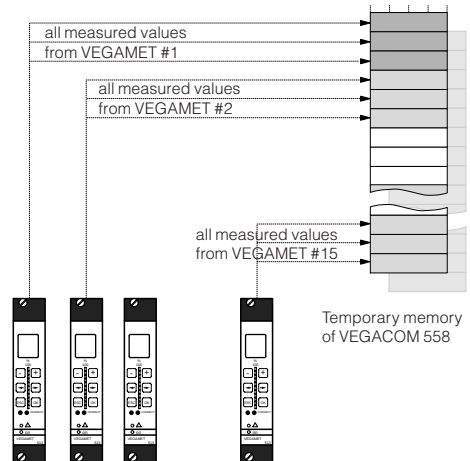
Call up of the switching conditions via:

- Function code 01 (= Read Coil Status) or alternatively via
- Function code 02 (= Read Input Status).

6.1 Storage of measured values when connected to DISBUS

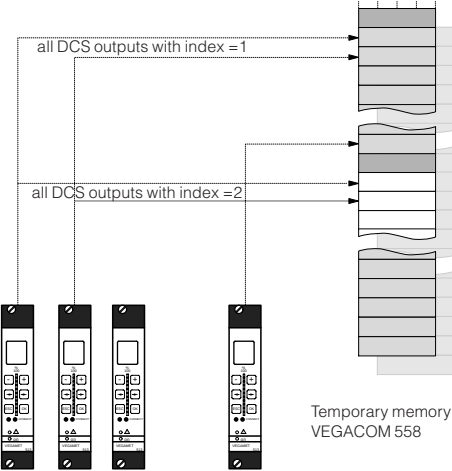
The addressing of the measured values for Modbus systems is "word-oriented". In VEGACOM 558, a measured value is represented by two words, the first word includes the real measured value, the next higher word the associated status information. In the standard, the term "register word" is also used instead of the term "word". The addressing is done via existing library calls of the process control system (e.g. Modicon).

As already mentioned, the storage of measured values for VEGAMET signal conditioning instruments can be influenced by the user. For this purpose, a connection to VEGACOM 558 must first be provided via a web browser. By activating the entry "DCS 1-7 from MET 1, ..." in the section "storage of measured values for MODBUS / TCP" in the HTML page "General", the measured values are saved in rising sequence acc. to the VEGAMET addresses.



Grouping of measured values acc. to VEGAMET addresses

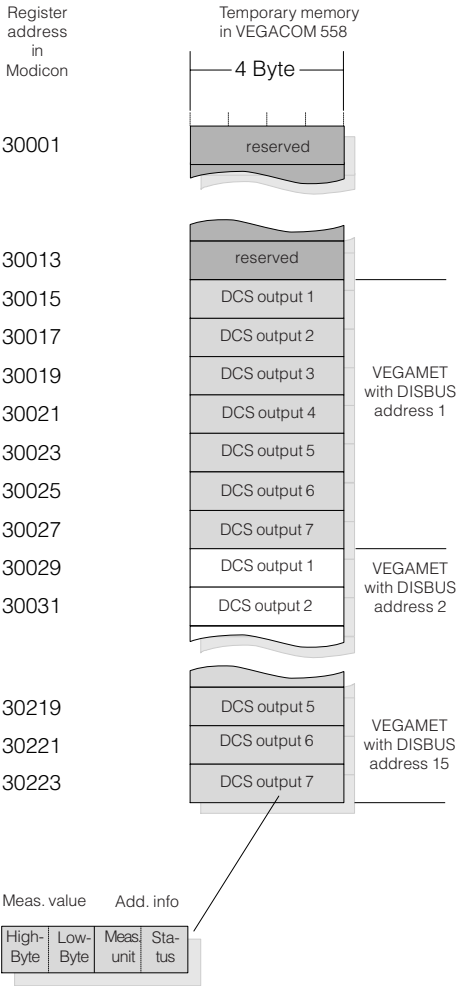
If the entry "DCS 1 from MET 1-15, ..." is activated, the measured values will be grouped acc. to DCS indices or channels.



Grouping of measured values acc. to DCS indices or channels

Addressing of measured values when connected to DISBUS
With grouping acc. to VEGAMET address (DCS 1 from MET 1, ...)

Organisation of the temporary memory for VEGAMET 513, 514, 515 or 614 signal conditioning instruments

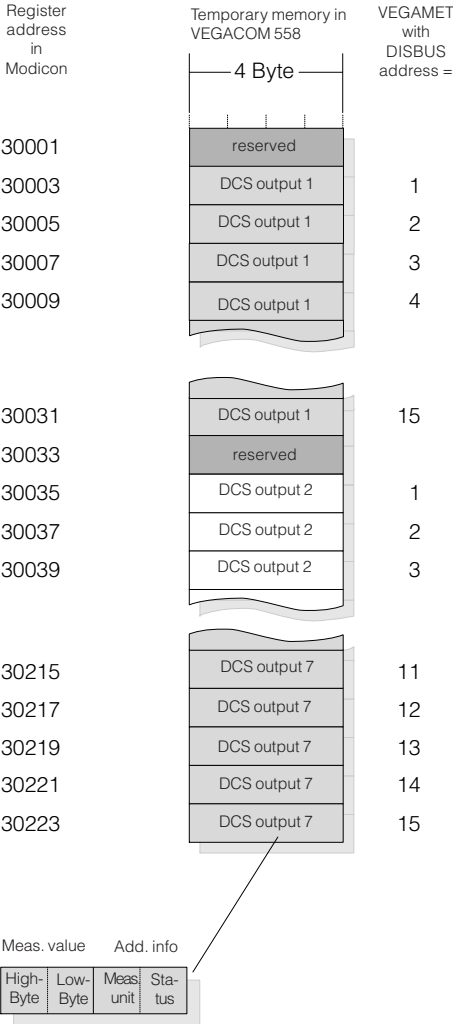


Grouping of measured values acc. to VEGAMET addresses on VEGAMET 513, 514, 515 or 614

Note:
A complete overview of the process image of VEGACOM 558 can be found in supplement A at the end of this operating instructions manual

Grouping acc. to DCS indices (DCS 1 from MET 1-15, ...):

Organisation of the temporary memory for VEGAMET 513, 514, 515 or 614 signal conditioning instruments



Grouping of measured values acc. to DCS indices for VEGAMET 513, 514, 515 or 614

Note:
A complete overview of the process image of VEGACOM 558 can be found in supplement A at the end of this operating instructions manual

6.2 Storage of contact inputs/outputs when connected to DISBUS

Beside the previously described measured values, it is also possible to transmit switching conditions of the VEGAMET 513, 514 and 515 signal conditioning instruments via VEGACOM 558.

This particularly includes:

- status of the contact inputs (key switch position, etc.)
- status of the contact outputs (relay or transistor outputs)

In contrast to the image of the measured values, the image of the switching status is "bit oriented". In the standard, these status bits are also called register bits. The addressing of the register bits for Modbus systems is "bit oriented". In VEGACOM 558, a switching status is represented as register bit, whereby all available information of a VEGAMET is saved in an associated block of 16 register bits. The storage of a 16 register bit block within VEGACOM 558 is controlled via the setting of the DISBUS address on VEGAMET. The addressing by means of the control system is normally done by existing library calls of a process control system (e.g. Modicon).

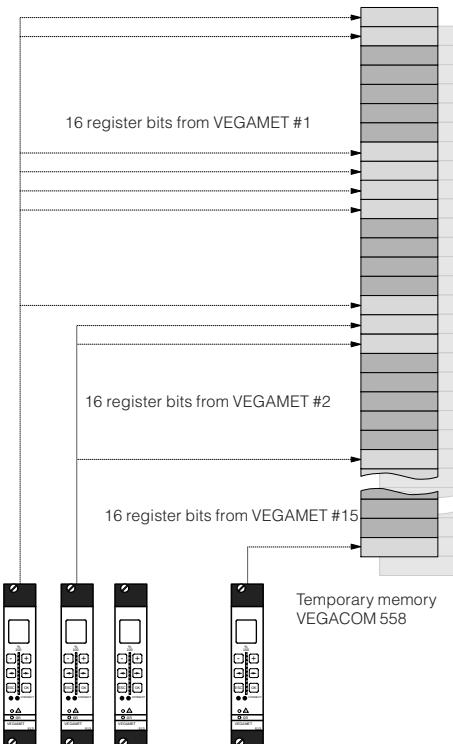


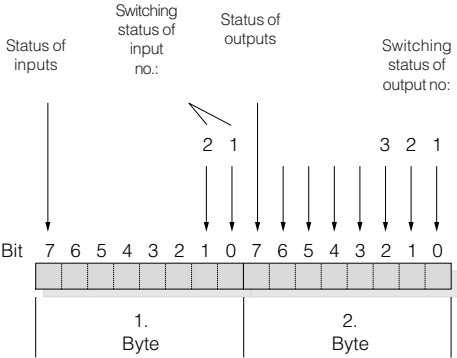
Image of the switching status in VEGACOM 558 for VEGAMET 513, 514, 515 or 614

Addressing of the switching conditions when connected to DISBUS

Register address in Modicon	Temporary memory in VEGACOM 558	
	1 BIT	
10001	Input contact 2	VEGAMET with DISBUS address = 1
10002	Input contact 1	
10003	reserved	
10004	reserved	
10005	reserved	
10006	reserved	
10007	reserved	
10008	Status: Inputs	VEGAMET with DISBUS address = 2
10009	Relay contact 1	
10010	Relay contact 2	
10011	Fail safe relay	
10012	reserved	
10013	reserved	
10014	reserved	
10015	reserved	VEGAMET with DISBUS address = 15
10016	Status: Outputs	
10017	Input contact 2	
10018	Input contact 1	
10019	reserved	
10238	reserved	VEGAMET with DISBUS address = 15
10239	reserved	
10240	Status: Outputs	

Addressing of the switching conditions in VEGACOM 558 for VEGAMET 513, 514, 515 or 614

If you imagine the 16 register bits belonging to a VEGAMET as one 16 bit word, the following graphical representation results.



The meaning of the individual bits is defined as follows:

Status of inputs:
0 = all inputs OK
1 = input status not available (no inputs configured or VEGAMET not available)

Switching status of inputs 1 and 2:
0 = input contact is open
1 = input contact is closed

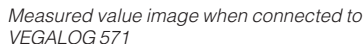
Status of outputs:
0 = all outputs OK
1 = output status not available (no outputs configured or VEGAMET not available)

Switching status of outputs 1, 2 and 3 (output 3 corresponds to fail safe relay):
0 = relay is deenergised
1 = relay is energised

Note:
A complete overview of the process images on the switching status of VEGACOM 558 can be found in supplement B at the end of this operating instructions manual.

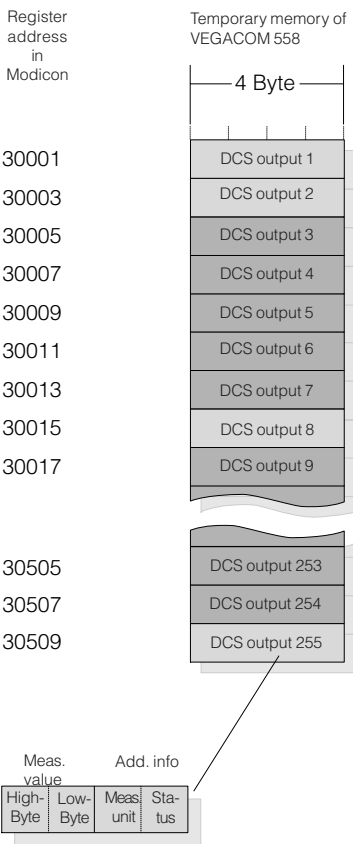
VEGALOG 571 can administrate up to 255 measurement loops. For the transfer of the measured values of a measurement loop, VEGALOG provides up to 255 DCS outputs.

One or several DCS outputs with any index can be assigned to each measurement loop. The configuration of VEGALOG 571 is done with the VEGA adjustment software VVO. The selected PC/DCS output defines where the appropriate measured values can be collected from the temporary memory of VEGACOM 558.



Addressing of measured values when connected to LOGBUS

The measured value image when connected to LOGBUS is always sorted acc. to the DCS outputs, the following illustration shows the addressing of the temporary memory via Modbus.



Addressing of the measured value when connected to LOGBUS

Note:

A complete overview of the process image of the measured values of VEGACOM 558 can be found in supplement A at the end of this operating instructions manual.

6.4 Storage of the contact outputs when connected to LOGBUS

Beside the previously described measured values, it is also possible to transfer switching conditions of the VEGALOG 571 processing system via VEGACOM 558.

This particularly includes:

- status of the contact outputs of the AR cards (relay contacts)
- status of the contact outputs of the AT cards (transistor outputs)

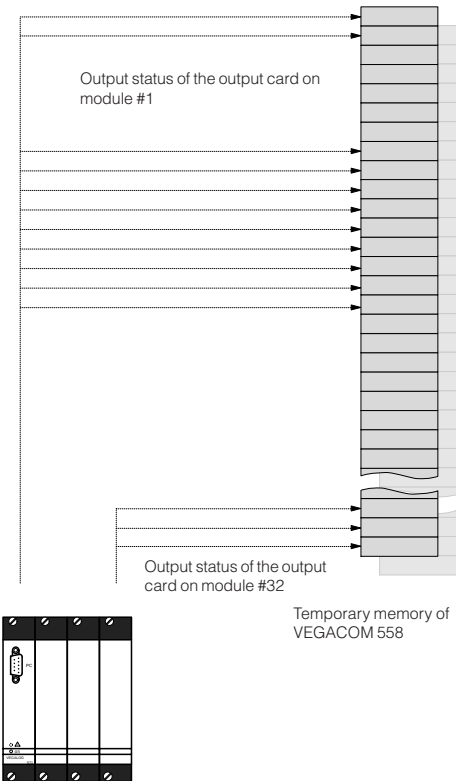


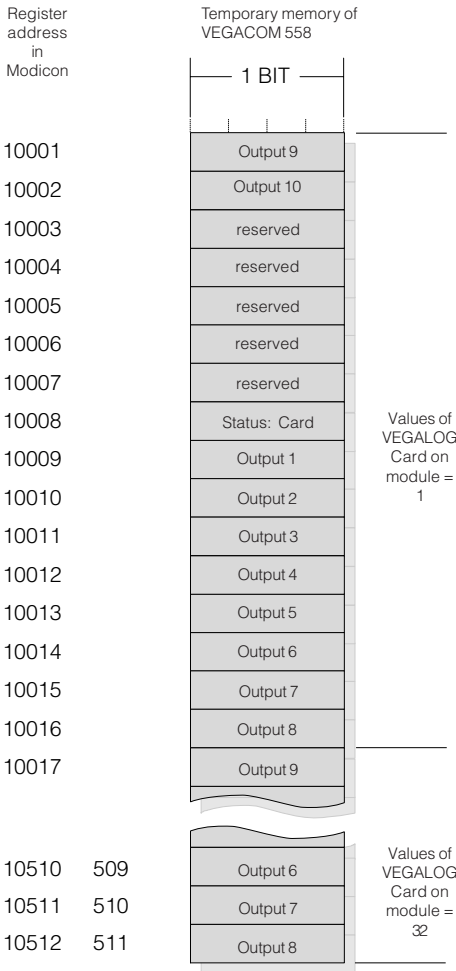
Image of the switching status in VEGACOM 558 for VEGALOG 571

In contrast to the imaging of measured values, the imaging of switching status is done "bit-oriented". In the standard, these status bits are also called "register bits". The addressing of the register bits for Modbus systems is therefore "bit-oriented". In VEGACOM 558, a switching status is represented by one register bit, whereby all available information of a VEGALOG output card type AR or AT is saved within an associated block of 16 register bits. The storage of a 16 register bit block within VEGACOM 558 depends on the module position in VEGALOG 571.

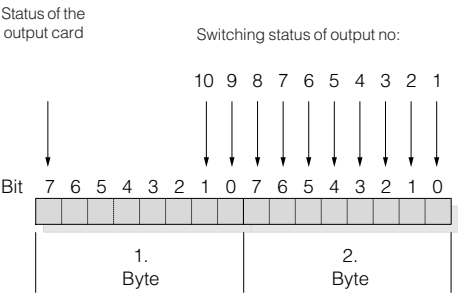
The addressing by the control system is done via existing library enquiries of a process control system (e.g. Modicon).

Addressing of the output status when connected to LOGBUS

The image of the output status when connecting to VEGALOG is always sorted acc. to the module numbers of the output cards, the following illustration shows the addressing of the temporary memory via Modbus.



If you image the 16 register bits belonging to a module card as one 16 bit word, the following graphical representation results:



The meaning of the individual bits is defined as follows:

- Status of the output card:
- 0 = OK
 - 1 = no values of the output card available (no outputs configured or card not available)
- Switching status of the inputs with AR or AT cards:
- 0 = relay deenergised
 - 1 = relay energised

Note:
A complete overview of the process image of the switching status of VEGACOM 558 can be found in supplement B at the end of this operating instructions manual.

Addressing of the switching status in VEGACOM 558 for VEGALOG 571

6.5 Format for transfer of measured values

Measured values and DCS values

The measured values of the VEGA processing systems (VEGAMET or VEGALOG) connected to VEGACOM 558 are imaged on the input registers of Modicon 584 as described in chapter 6.1 and 6.3. In VEGACOM 558, they are available for collection as so-called DCS values. One DCS value covers two register addresses, this means that it consists of two double words, i.e. 4 bytes. A complete overview of the image of the DCS values in the input registers of Modicon can be found in supplement A of this operating instructions manual.

Structure of a measured value

Measured values of VEGALOG or VEGAMET are transferred to VEGACOM 558 as signed data comprising 2 octets. This means, that the value range is max. +32.768 to -32.767.

Structure of a DCS value

A single DCS value in VEGACOM 558 consists of 4 octets and consists of the following:

DCS value			
Meas. value		Add. info	
Octet 1	Octet 2	Octet 3	Octet 4
High-Byte	Low-Byte	Maßeinheit	Status

The real measured value has a length of 2 octets and is signed, this means that the value range is between +32768 and -32767.

In addition to the measured value, VEGACOM 558 provides one octet per DCS value for measuring unit and another octet for information on the actual status of the measured value.

The octet for the measuring unit is not presently used and is always filled with the value zero.

The status describes the condition of the two associated measured value octets. The contents of the measured value octet is only valid if the assigned status has the value zero.

If you have a status value unequal zero, the status value and the associated value in the measured value field must be taken into account for a detailed failure diagnosis. The following list explains the possible errors:

Status	Meas. value	Meaning
0x00	0xXXXX	valid meas. value
0x01	0xXXXX	simulated meas. value (only with VEGAMET 509 and 512)
0x80	0xXXXX	old meas. value (probably interrupted connection)
0xFE	0x0000	no measured value available (not configured)
0xFF	0xFFFF	no VEGAMET or VEGALOG connected XX = type of error
0xFF	0x8000	failure message of an individual measurement loop Type of error is not defined

7 VEGACOM 558 as web server

7.1 VEGACOM in the Internet

In this document, the function of VEGACOM 558 as web server within the company network is described. If the Internet can be accessed from the company network, VEGACOM can also function as web server in the "World Wide Web". The necessary steps are not part of this document and will be generally done by the system administrator.

7.2 Predefined web pages

If VEGACOM 558 is participant on the network, the measured values of VEGA sensors can be shown as a Web page and an online overview of the VEGA measuring systems can be shown with an Internet browser. For this purpose, VEGACOM contains already predefined web pages. To show these web pages, the IP address of VEGACOM 558 must be entered in the browser:

http://xxx.xx.x.xxx = IP address

The browser then calls up the following html file (start page):

http://xxx.xx.x.xxx/vega/deutsch/process/index.htm

Index.htm - Microsoft Internet Explorer

Adresse: <http://172.16.9.176/vega/english/process/index.htm>

Hostname: "COM558"

Process info

- [Readings \(0/2\)](#)
- [Readings \(No.\)](#)
- [System](#)

Diagnostics

- [Diagnostic buffer](#)
- [Send mail](#)

Adjustment

- [Network](#)
- [Webserver](#)
- [Mailserver](#)
- [Mailreceptors](#)
- [General](#)
- [Language](#)
- [User management](#)

Table of readings arranged by name (page 1 of 2)
from 05/03/02 11:43:31

measurement loop	no. of DCS output	reading	dimension
02 EA-01	[002]	0.00	%
02 EA-02	[003]	-----	%
02 EA-03	[001]	-----	Lin%
02 EA-03	[023]	-----	%
02 EA-07	[004]	0.00	%
02 EA-09	[005]	-----	%
02 EA-10	[006]	-----	%
10 EV-01	[007]	-----	%
10 EV-03	[009]	-----	%
10 EV-04	[010]	-----	%
10 EV-05	[011]	-----	%
11 EP Nr.11	[013]	0.01	%
11 EP Nr.16	[014]	-----	%
11 EP Nr.20	[019]	-----	%
11 EP Nr.24	[012]	477	l
11 EP Nr.32	[015]	-----	%
11 EP Nr.49	[016]	0.04	%
11 EP Nr.64	[018]	-----	%

Previous page 1 2 Next page

© Lokales Intranet

The html file is configured such that all existing measurement loops, sorted according to measurement loop names, are automatically displayed (splitting in several pages, switching over via the navigation board below the measured value tables). By clicking the link [Measured values \(No.\)](#) the measurement loops will be sorted according to the number of the DCS output. The html file, however, is not accessible and cannot be modified.

In addition, it is possible to make different VEGACOM settings and modifications with the browser on the predefined web pages. For this purpose, you will find links on the web page which will pass you on to the appropriate page. For this purpose, the web page is provided with links leading you to the respective page. These links are not visible on the start page. The corresponding authorisation level of the user can be released with "Release settings". Acc. to the factory setting, first of all each user has access. First of all, everybody can access this function by factory setting. By activating the user management, access can be avoided (see chapter "User administration").

- network settings (host name, modification of the IP address, subnetwork masks and Name-Server addresses)
- web server (updating intervals of the web pages, selection of different web pages)
- setup mail server
- definition of the email messages (recipient, documents, transmitting times)
- title of web pages, date and time in VEGACOM 558 (important for time-controlled emails)
- language used by VEGACOM 558 (German or English)
- user management.

Hostname: "COM558"

Process info

- [Readings \(a..z\)](#)
- [Readings \(No.\)](#)
- [System](#)

Diagnostics

- [Diagnostic buffer](#)
- [Send mail](#)

Adjustment

- [Network](#)
- [Webserver](#)
- [Mailserver](#)
- [Mailreceptors](#)
- [General](#)
- [Language](#)
- [User management](#)

Links

Note:
Some Internet browsers use the setting "Use temporary internet files". This causes the browser to read the file, once it has been loaded, again and again from the local hard drive. This setting should be changed to ensure that the HTML pages are always up-to-date when calling up measured values or the configuration pages of VEGACOM.

7.3 Network settings

Like with the adjustment software VVO, the IP address, sub net mask, host name¹⁾ and Name-Server addresses of VEGACOM 558 can be also modified with the Internet browser. An IP address must be assigned beforehand to VEGACOM so that it can be identified on the network (IP address set as default: 192.168.200.200).

Hostname: "COM558"

Process info

[Readings \(a..z\)](#)

[Readings \(No.\)](#)

[System](#)

Diagnostics

[Diagnostic buffer](#)

[Send mail](#)

Adjustment

[Network](#)

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Configuring the Ethernet interface

Basic configurations for the VEGACOM 558

Hostname

Hostaddress

Subnet mask

Optional configurations (special network services)

Address of the Domain Name Server (DNS1) to be used

Address of a second Domain Name Server (DNS2)

Address of the standard gateway

¹⁾ Approved are alphanumeric characters and stroke. Do not use special characters.

Subnets with VEGACOM 558

For the use of subnet masks with VEGACOM 558, the same rules as for any Ethernet host apply. A host only processes telegrams whose destination addresses have full compliance with their own subnet. A specific subnet is determined by its own IP address and the subnet mask. By AND linking of IP address and subnet mask, you will get the appropriate subnet. In other words, all bit positions of the subnet mask set at "1", determine the NetID, i.e. the subnet. The more bit positions used for the determination of the NetID, the less combinations remain for the HostID.

Example:

VEGACOM 558 IP address: 192.168.200.1 (Class-C)

Standard masking (subnet mask): 255.255.255.0

This means for VEGACOM 558:

- VEGACOM 558 is in the subnet 192.168.200.0 (with max. 253 participants)
- VEGACOM 558 processes all telegrams on the Ethernet whose destination addresses start with 192.168.200.
- VEGACOM 558 itself can only transmit telegrams whose destination addresses start with 192.168.200

Improved masking by e.g.: 255.255.255.128

This means for VEGACOM 558:

- By setting an additional bit in the subnet mask, the above-mentioned subnet will be divided into two sections.
- VEGACOM 558 is now in subnet 192.168.200.0 (with max. 126 participants)
- VEGACOM 558 processes all telegrams on the Ethernet whose destination addresses are between 192.168.200.1 and 192.168.200.127.
- VEGACOM 558 itself can only drop off telegrams whose destination addresses are between 192.168.200.1 and 192.168.200.127

DNS by means of VEGACOM 558

If an application on a host (with VEGACOM 558 e.g. the Mail Client or PING in TELNET window) tries to call another network participant with its host name, the enquiring computer first has to know the IP address of the destination computer.

The following steps are carried out:

Step 1:

The enquiring computer (VEGACOM 558) first asks via an ARP enquiry for the MAC address of the entered DomainNameServers in the network. If available, the MAC address is returned.

Step 2:

The enquiring computer (VEGACOM 558) transmits a DNS telegram to the DomainNameServer asking "which IP belongs to the host name xyz". If the name server can resolve the host name, it will return the requested IP directly as answer (probably the enquiry will be transferred to another name server).

Step 3:

The enquiring computer (VEGACOM 558) can now transmit the telegrams directly to the destination computer, the IP of which is known now.

Note!!!

Conversion of the DNS configuration is currently only effective after a restart of VEGACOM 558.

Determine standard gateway for VEGACOM 558

From Rev. 1.10, VEGACOM 558 supports gateways or routers, whereby these must be accessible within the subnet with regard to their IP address.

This means:

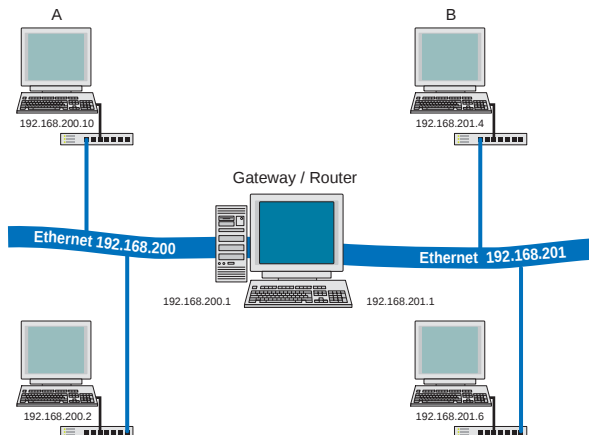
If a gateway address is entered in VEGACOM 558 which does not fit the network address and the subnet, VEGACOM 558 will deactivate the gateway support.

Function:

If a gateway address unequal 0 is entered in VEGACOM 558, the gateway functionality will be activated. The above-mentioned boundary condition, that the used address must be accessible within the subnet / NetworkID, is a prerequisite.

Example:

If Host A (192.168.200.10) tries to reach a Host B in network 192.168.201, the protocol software in Host A determines by means of the subnet entry that the destination host is in another network. If an IP address is defined for a gateway, Host A will transmit an ARP enquiry to the entered gateway to get its MAC address. Finally Host A transmits the requested telegram to Host B, whereby the destination IP of the destination computer (i.e. Host B) is entered, however, as destination MAC, the destination IP of the gateway is used.



By handing from one network to the other, the router replaces in the received datagram the destination MAC address, either with the one of the next router or with the one of the addressee (provided it can be reached already directly).

On VEGACOM 558, the announcement of a router/gateway is carried out exclusively by manual configuration.

7.4 Web server settings

Here you can adjust the updating intervals of the html page. The empty field can be used for a file created by yourself (see chapter "8 Your own html documents"). The field list then always extends itself by one new position by pushing the button "Save list". If you open a file entered into the list via an Internet browser, the browser will call up this page cyclically acc. to the set updating period.

Process info Readings (a..z) Readings (No.) System Diagnostics Diagnostic buffer Send mail Adjustment Network Webserver Mailserver Mailreceptors General Language User management	Configuration of auto-update of websides Define update interval for websides <table border="1"> <thead> <tr> <th>website name</th> <th>refresh</th> </tr> </thead> <tbody> <tr> <td> vel_name.htm </td> <td>every 1 minutes </td> </tr> <tr> <td> vel_dcs.htm </td> <td>every 1 minutes </td> </tr> <tr> <td> system.htm </td> <td>every 1 minutes </td> </tr> <tr> <td> report.htm </td> <td>every 1 minutes </td> </tr> <tr> <td> </td> <td>every seconds </td> </tr> </tbody> </table> Submit update table Pagesize for measurement value table Enter the number of lines/measurement values (1 .. 255) per side Submit pagesize	website name	refresh	vel_name.htm	every 1 minutes	vel_dcs.htm	every 1 minutes	system.htm	every 1 minutes	report.htm	every 1 minutes		every seconds
website name	refresh												
vel_name.htm	every 1 minutes												
vel_dcs.htm	every 1 minutes												
system.htm	every 1 minutes												
report.htm	every 1 minutes												
	every seconds												

7.5 Send emails

First of all, the mail server must be set up so that VEGACOM 558 can send emails. Enter the IP address of the mail server in the field "IP address of the outbox server (SMTP)" (you will get the IP address from the network administrator). If the mail server has Internet access, it is possible to send emails worldwide.

Process info Readings (a..z) Readings (No.) System Diagnostics Diagnostic buffer Send mail Adjustment Network Webserver Mailserver Mailreceptors General Language User management	Define the mailserver to be used by VEGACOM 558 Define mailserver output servers IP-address (SMTP) [e. g. 192.168.200.1] input servers IP-address (POP3) [e. g. 192.168.200.1] Mailaddress of the sender mailaddress of this VEGACOM 558 Access protection of the input server user name of the account ? password of the account ? Submit configuration of the mailserver
--	--

You must then define the mail recipients¹⁾ (in the field "email address"). Any weekday or exact daily time can be entered as transmission time. Instead of the entered documents **val_name.htm** , your own file can also be sent, e.g. **layouts/val_name.htm** (see chapter "8 Your own html documents").

Process info
[Readings \(a..z\)](#)
[Readings \(No.\)](#)
[System](#)
Diagnostics
[Diagnostic buffer](#)
[Send mail](#)
Adjustment
[Network](#)
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[Mailserver](#)
[Mailreceptors](#)
[General](#)
[Language](#)
[User management](#)

Define the mail receptors

mail address	document	time to send	delete entry
		Monday	☐
Submit receptor table			

If you want to send text files instead of the html file by email, you can enter as attachment document **var/pls.csv**. Contrary to html files, this file can be easily integrated into other documents for further processing (registered...). For this kind of processing, VEGACOM 558 provides in the directory "var/" two files which will be updated approx. every 5 s. The file named **var/pls.csv** includes DCS no., Tag names, measured values and associated units of all measurement loops of the connected VEGA system in ASCII format, whereby the individual fields are separated by " ; ".

The file named **var/rel.csv** includes card number and switching status of the associated relay output of all module cards for the connected VEGA system in ASCII format, whereby the individual fields are separated by " ; ".

- pls.csv: Includes all measured values of the measurement loops incl. DCS output number, TAG name and unit configured in the VEGA processing system connected to VEGACOM 558.

Beispielplot:

```
#VERSION: 1.0
#FROM: COM558_Mast
#DATE: 05.07.2001 10:05
#FIELDS: Pls;Tag;Value;Unit
001;aa_temperatur ; 96.46;Lin%
002;Grenz_kapazitiv ; —;Lin%
003;druck_kompakt ; —;Lin%
```

¹⁾ Approved are alphanumeric characters and stroke. Do not use special characters.

- rel.csv: Includes the switching status of all relay outputs or contact inputs (only with VEGAMET) of the measurement loop including all card numbers for VEGALOG or DISBUS addresses for VEGAMET configured in the VEGA processing system connected to VEGACOM 558.

Example plot on VEGALOG:

```
#VERSION: 1.0
```

#FROM: COM558 Mast

#DATE: 05.07.2001 10:14

#FIELDS: Card;R1;R2;R3;R4;R5;R6;R7;R8;R9;R10

01;-:-:-:-:-

02;-:-:-:-;

03:-:-:-:-:-

04;-:-:-:-:-

05:-::-:-::--

06:-:-:-:-:-:-:-:-:-:-

07:0:0:0:0:0:0:0:0:0:0

Note: Only the "own" contact inputs will be displayed. If a VEGAMET uses the inputs of another VEGAMET, these status will not be shown in the CSV file.

After sending the mails, a status message (confirmation) is made if the mails are received by the mail server. When clicking the link **Diagnostic buffer**, you will see details on sent emails.

Independent of automatic sending of emails, it is always possible to manually send a message with the current measured values. To do this, click the link **Submit mail**.

In the following window, you can enter and then send immediately the email address, a text and an attached file.

Process info

[Readings \(a..z\)](#)
[Readings \(No.\)](#)
[System](#)

Diagnostics

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Transmitting HTML-files as mail

Data concerning the message to send

Receptors mail-address

h.oswald@de.vega.com

Subject of the mail

Message from VEGACOM 558

Message of the mail

This is a message from your COM558

Attachment of the mail (optional)

val.name.htm

Submit Mail

7.6 Language of VEGACOM 558

With the selection of the language (German or English), not only the language of the screen user interface is modified. An important consequence of changing the language is the calling up of a different html page. With the language English, VEGACOM displays the file **http://xxx.xx.x.xxx/Index_uk.thml** when entering the address: **/vega/englisch/process/index.htm..**

Process info

[Readings \(a..z\)](#)
[Readings \(No.\)](#)
[System](#)

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Language for VEGACOM 558 dialogues

Language choice

Which language shall be used by the VEGACOM 558 ?

english

Submit language choice

7.7 Real time clock

Since VEGACOM 558 can send time-controlled emails, the current time must be available. There is a battery-buffered real time clock in the CPU of VEGALOG 571 which is used by VEGACOM. In the illustrated configuration window, time and date can be adjusted manually and transferred to the RAM memory of the CPU card.

With **Save**, the time will be permanently implemented and remains even in case of mains failure.

Process info Readings (a..z) Readings (No.) System Diagnostics Diagnostic buffer Send mail Adjustment Network Webserver Mailserver Mailreceptors General Language User management	General Information Title of website Define a title for the COM 558's website Submit title realtime clock Current date (Format: dd/mm/yy) 05/03/02 Submit date Current time (Format: hh:mm:ss) 11:57:53 Submit time Storing order (dcs-readings) for Modbus TCP (only for DISBUS-connection) In which order do you want to receive the dcs-readings ? Submit Sorting mode DCS1-7 of MET1, ...
---	---

Note:

If VEGACOM 558 is used in conjunction with DISBUS, no buffered real time clock is available. After a supply interruption to VEGACOM, the time must be readjusted.

7.8 User Management

The web server of VEGACOM 558 enables the user to read out all measured values of the level measuring system, or to spy on them, so to speak to. In addition, fundamental configurations such as authentication, mailing lists etc. can be modified. To avoid inadvertent or deliberate manipulation of the data bank of VEGACOM 558, the web service must be protected against unauthorised access.

For this purpose, the VEGACOM 558 web server offers basic functions for user management. The user management system works directory-oriented, i.e. access authorisation can be defined for certain directories.

To keep the complexity of user management to a minimum, VEGACOM 558 does not offer the option of defining new user authorisations to create new user groups. Rather, ten fixed user groups with fixed user rights are stored in VEGACOM 558.

The administrator of VEGACOM 558 can now assign any number of users with their individual passwords to these ten user groups. The allocations are made via the web browser in the menu item "User management" on the VEGACOM 558 web pages.

Hostname: "COM558"

VEGA

Process info

[Readings \(a..z\)](#)

[Readings \(No.\)](#)

[System](#)

Diagnostics

[Diagnostic buffer](#)

[Send mail](#)

Adjustment

[Networks](#)

[Webserver](#)

[Mailserver](#)

[Mailreceptors](#)

[General](#)

[Language](#)

[User management](#)

Survey of the settings for Usermanagement

(Current user is: "-----")

Usermanagement is currently **non-active** !

Activate Usermanagement

Current assignments of Users to Usergroups

User	Usergroup		
ADMIN	ADMINISTRATOR	Delete	Modify
VEGA	PLANNING	Delete	Modify
Oswald	ADMINISTRATOR	Delete	Modify
Add user			

Current assignments of directories to Usergroups

Directory	Usergroup
-----------	-----------

7.8.1 Factory setting

VEGACOM 558 is factory set to user management = Off. If the user management is activated for the first time (see chapter "7.8.2 User management On/Off"), two users are preconfigured (delivery status).

User	Password	Group
ADMIN	ADMIN	ADMINISTRATOR
VEGA	VEGA	PROJEKTIERER

7.8.2 User management On/Off

As a standard feature, VEGACOM 558 is delivered with status "User management = INACTIVE". In this setting, access to all web pages of VEGACOM 558 via the web browser is possible from any computer in the network without authentication. The current user is displayed as " _ _ _ _ ".

In the page "User management", the activation can be carried out with the push button **Activate user management**.

Survey of the settings for Usermanagement
(Current user is: " _ _ _ _ ")

Usermanagement is currently **non-active** !

Current assignments of Users to Usergroups

User	Usergroup		
ADMIN	ADMINISTRATOR	Delete	Modify
VEGA	PLANNING	Delete	Modify
Oswald	ADMINISTRATOR	Delete	Modify
Add user			

7.8.3 Assignment of users to user groups

When the page "User management" is called, VEGACOM 558 automatically generates a complete list of currently defined users. Beside the existing users, the assigned user groups will also be listed automatically. All items on this page are defined as "read only"!

To modify this list, the following functions are available via "Push buttons":

- **Delete** - deletes users from a list
- **Modify** - opens the menu "Modification of user data", shown below

With "**Add user**", the dialogue for creating a new user is opened. This dialogue generally corresponds to the dialogue "Modify user data".

Modify Userdata

The User "**Oswald**" is currently assigned to Usergroup "**ADMINISTRATOR**".

When you intend to change the Username, the Password and/or the assignment to the Usergroup, please enter the new data into the fields below.
Complete the procedure by pushing "Submit Userdata".

Modification of Userdata
Please enter the new data

Username	Password	Usergroup
Oswald		ADMINISTRATOR

Field user name:

Here, any user name can be entered. The name must be unambiguous, i.e. it must not be used already and can have between 1 ... 16 characters (only a ... z, A ... Z, 0 ... 9).

Field password:

Here you can enter a password belonging to the user. The presentation is hidden, i.e. one asterisk per entered character appears in the entry field. The password can consist of 1 ... 16 characters (only a ... z, A ... Z, 0 ... 9). The input of a password is not absolutely necessary.

Field user group:

Select the requested user group from the list box.

7.8.4 Directories/Areas

When the page "User management" is called, VEGACOM 558 automatically generates a complete list of the current directories in the RAM disk of VEGACOM 558. Beside the existing directories, the assigned user groups will also be listed.

With the button **"Modify"**, available for each entry, the assignment of the user group, and therefore user authorisation, can be modified.

Andere Benutzergruppe zuweisen

Das Verzeichnis **"/VEGA/ENGLISH/PROCESS"** ist derzeit der Benutzergruppe **"MAINTENANCE"** zugeordnet.

Wenn Sie eine andere Benutzergruppe zuordnen wollen, wählen Sie aus der unten stehenden Liste den entsprechenden Listeneintrag aus und bestätigen den Vorgang mit "Benutzergruppe übernehmen".

Neue Benutzergruppe zuweisen

Ordnen Sie die gewünschte Benutzergruppe zu:

< === >

MAINTENANCE ▾

Benutzergruppe übernehmen

Directory name and user group are taken over from the activated line on the user management page.

The field of the directory name is still "read only".

The requested user group can be selected from the list box.

Andere Benutzergruppe zuweisen

Das Verzeichnis **"/VEGA/ENGLISH/PROCESS"** ist derzeit der Benutzergruppe **"MAINTENANCE"** zugeordnet.

Wenn Sie eine andere Benutzergruppe zuordnen wollen, wählen Sie aus der unten stehenden Liste den entsprechenden Listeneintrag aus und bestätigen den Vorgang mit "Benutzergruppe übernehmen".

Neue Benutzergruppe zuweisen

Ordnen Sie die gewünschte Benutzergruppe zu:

< === >

ADMINISTRATOR ▾

Benutzergruppe übernehmen

7.8.5 Selectable user groups and their access authorisation

To give the operator of a VEGA measuring system (in conjunction with VEGACOM 558) the ability to transmit selective information to certain subcontractors or company staff, there must be an option for user-dependent access control.

The following user groups are preset in VEGACOM 558. The administrator can assign any user to the first eight. All users assigned e.g. to the group "Planning" will have access authorisation for the directories (and the subjacent ones) which are assigned to "Planning".

The "rights" (write, read) of the first eight user groups are identical. By means of the group names, a logical, hierarchic graduation is created. Exactly this hierarchic graduation for assignment of user groups to directories is preset at the factory. If this setting remains unchanged, the following access options result.

Group	Access to own, also customer-specific, web pages	Access to measured value pages (plant)	Access to configuration pages (plant)	Access to "/SYSTEM" area
ADMINISTRATOR	x	x	x	x
PLANNING	x	x	x	
MAINTENANCE	x	x		
USER GROUP 1	x			
USER GROUP 2	x			
USER GROUP 3	x			
USER GROUP 4	x			
USER GROUP 5	x			
ALL				
NO ACCESS				

The administrator must determine in the configuration which directories, if any, the user groups PLANNING to USER GROUP 5 will have access to (especially in the areas of customer-specific web pages. A possible version is shown in the illustration.

Group "NO ACCESS"

Users assigned to the group "NO ACCESS" have no access authorisation. This status corresponds to "Deactivation of a user".

The assignment of directories to user group "NO ACCESS" is not recommended and is not accepted by VEGACOM 558.

Group "ALL"

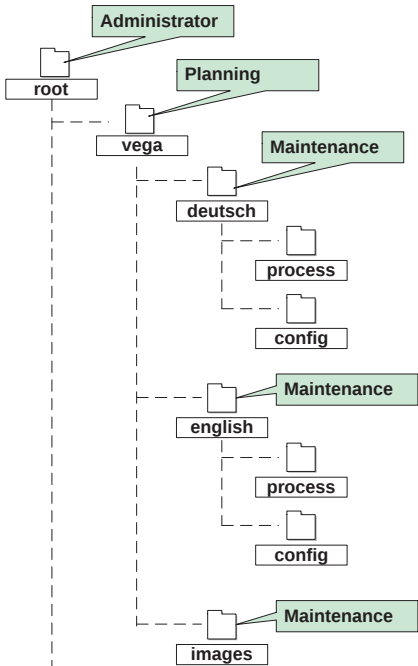
Anyone can access directories assigned to the user group "ALL" without authorisation.

The assignment of users to group "ALL" is not a good idea and is therefore not allowed by VEGACOM 558.

Generally, web browsers allow the access authorisation settings to be saved for later program launches.

To facilitate user management, VEGACOM 558 organises the directories for web pages in such a way that the above-mentioned user groups are indicated within the directory hierarchy.

This means that the customer can selectively assign access authorisation by means of a well thought-out directory structure ...

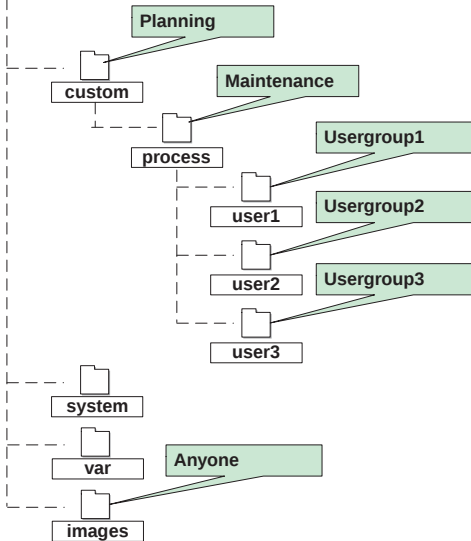


The correlation between directory hierarchy and user groups is shown in the diagram on the left.

If the preset structures are used for "customized-Sites", the planning engineer can also control the user authorisation for the "customised area" by means of a hierarchical system.

The authorisation a user group has is automatically passed on to hierarchically "lower" directories. "Planning" for example, with authorisation for the directory /VEGA, has automatically the same authorisation for all subdirectories of /VEGA.

Note:
When planning, please note that exactly one user group can be assigned to one area!



8 Your own html documents

To show the predefined web pages of VEGACOM with an Internet browser, the IP address of VEGACOM 558 must be stated in the browser:

http://xxx.xx.x.xxx = IP address

The browser then calls up the following html file (start page):

http://xxx.xx.x.xxx/vega/deutsch/process/index.htm

The directory VEGA with the html files is not visible and cannot be modified. In the configuration window of VEGACOM 558, there is an additional directory called **Layouts**. This directory contains six files

- BANNER.HTM
- INDEX.HTM
- CONTENT.HTM
- Formate.css
- Val_dcs.htm
- Val_name.htm

To show these files, the following address must be entered in the browser:

http://xxx.xx.x.xxx/layouts/dateiname.htm

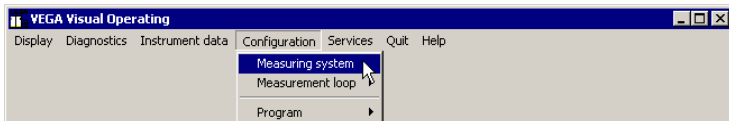
When choosing the file **layouts/index.htm**, you will find no difference between it and the respective file in the VEGA directory. The files of the layout directory, however, can be copied to the PC, processed and loaded again in the memory of VEGACOM. Independent of this, it is possible to create your own html pages and load them in VEGACOM. This feature makes it possible to create individual html documents adapted to your own requirements.

Note:

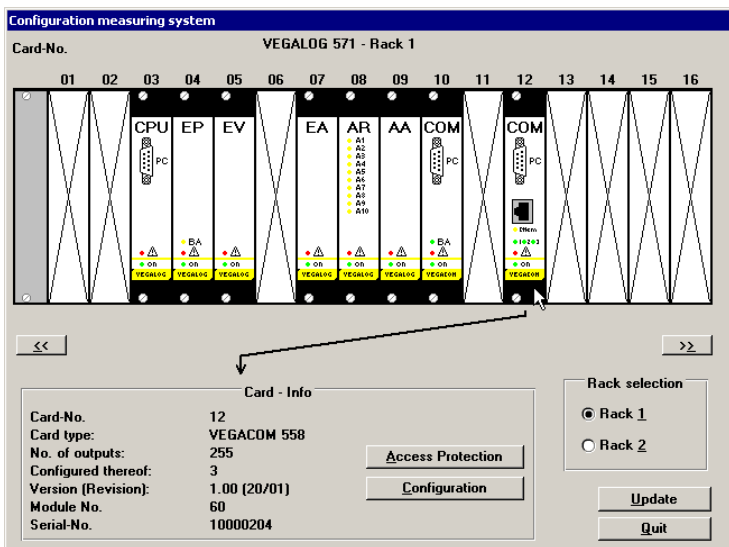
- When creating html pages, we recommend that you observe html standard 4.0.
- The memory space provided in VEGACOM is approx. 180 kByte. A "flash-disk" is used as storage medium.

8.1 Transfer html files

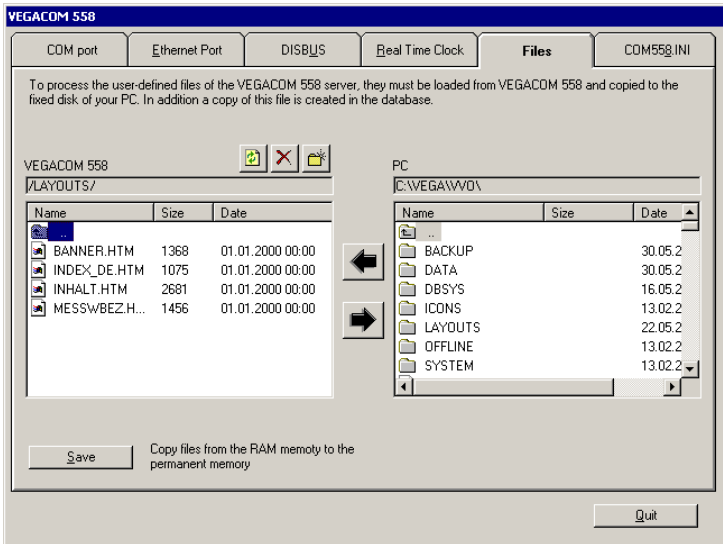
To reach the directory "Layouts", you have to go with VVO to the configuration window of VEGACOM 558. Click to **Configuration, Measuring systems**.



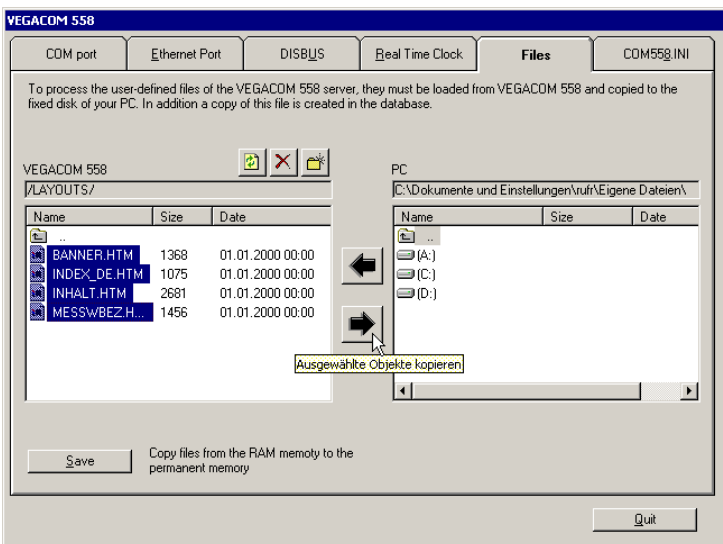
Click in the following windows to **VEGACOM 558**, then the button **Configuration**.



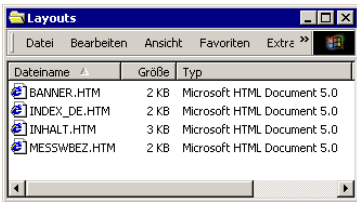
In the following window, you click to **Files**, then double click the directory **Layouts** (left side of the window). The files in the layout directory appear.



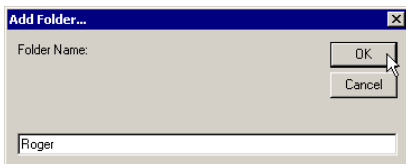
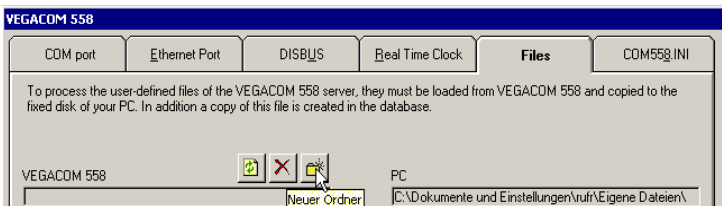
To transfer these files to the PC, you first have to select a destination directory (right side of the window). Then choose the files (left side). Finally click to the "arrow to the right".



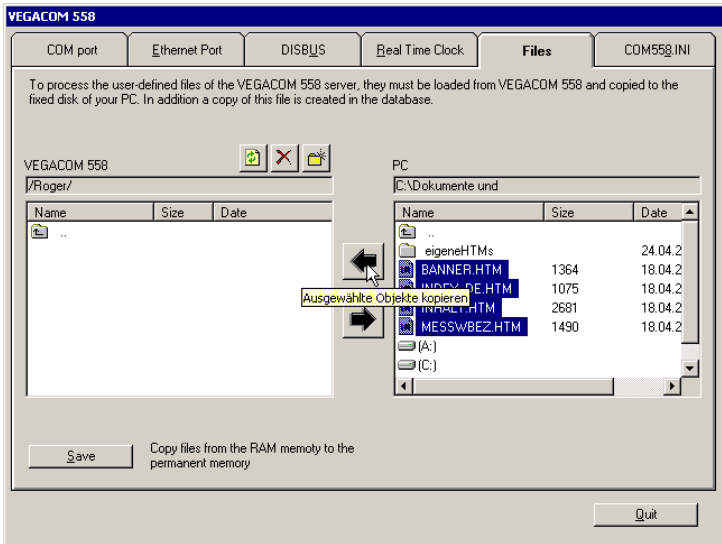
You now find the directory with the copied files on your PC.



These files can be processed according to your requirements and retransferred to VEGACOM. If you leave the names of the new files unchanged and define the directory "Layouts" as destination when retransferring to VEGACOM, the old VEGACOM files will be overwritten. It is a good idea to create a new destination directory in VEGACOM.



Transferring files from PC to VEGACOM works the same as vice versa. First of all, choose on the left side of the window the VEGACOM destination folder by double clicking, then on the right side of the window the html files and then click to the "arrow to the left".

**Note:**

After transfer, the files are only available in the operating memory of VEGACOM. After pushing the button **Save** the files are written in the hardware memory (flash-disk) of VEGACOM.

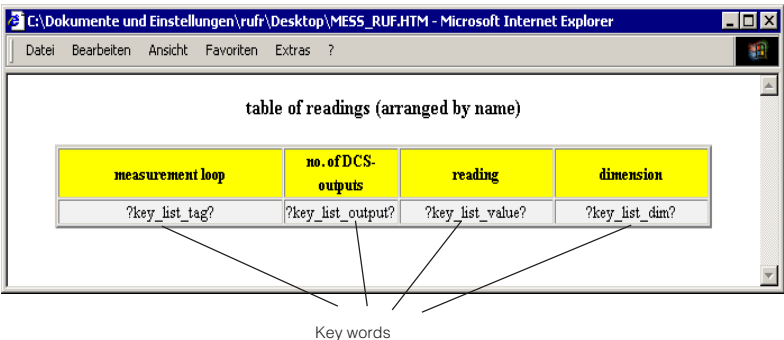
8.2 Structure of html files

- According to the MS-DOS convention, file names must consist of max. eight characters and three-digit extension.
- If only a path name (without file name) is stated in the URL when calling up VEGACOM, start page **INDEX.HTM** must be stated.
- It is also possible to integrate graphics. The formats gif and jpg are supported.

The following example is a very simple html document (MESS_RUF.HTM), but it is sufficient as an example of general structure.

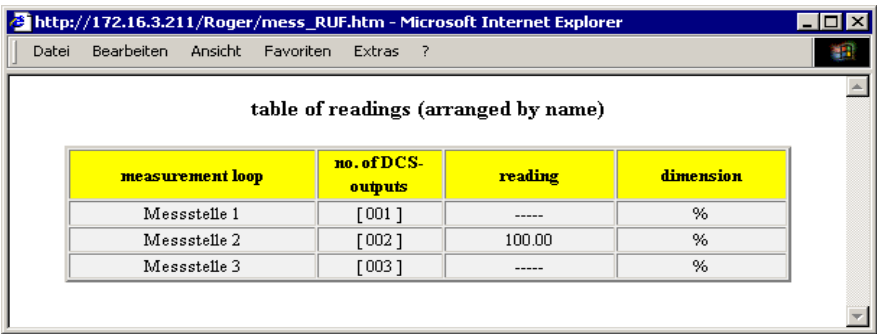
This is how the document looks when it is shown with an Internet browser.

To show variable values, such as e.g. measured values, "key words"



are used. These key words are part of the html documents. If you load the document into the memory of VEGACOM, VEGACOM enters the appropriate value.

This is how the document looks when it is loaded into the memory of VEGACOM and shown with the browser.



html file in source code

```

<html>

<p align="center"><b>table of readings (arranged by name)</b></p>

<table align="center" border="2" width="90%" height="1" cellspacing="1"
  BGCOLOR="#EEEEEE">
  <tr BGCOLOR="#FFFF00">
    <th align="center" width="30%" height="7%"><font size="2">measurement loop</font>
    <th width="15%" height="7%"><font size="2">no. of DCS-outputs</font>
    <th width="20%" height="7%"><font size="2">reading</font>
    <th width="20%" height="7%"><font size="2">dimension</font>
  </tr>

  <tr>
    <td align=center><font size="2">?key_list_tag?</font></td>
    <td align=center><font size="2">?key_list_output?</font></td>
    <td align=center><font size="2">?key_list_value?</font></td>
    <td align=center><font size="2">?key_list_dim?</font></td>
  </tr>
</table>

<p>

</body></html>

```

For simplification, the key words are shown in bolt print. In this file, only the most important key words are used. On the following pages, all possible key words are listed and described in detail.

8.3 Key words for output in html files

To display the measured values via a web browser, VEGACOM knows a set of key words. Depending on whether the user wants to call up the measured values in the form of lists and tables or only individual measuring results on his page or within a context, two different categories of key words are available.

Measured value key words for lists or tables

For special applications in lists or tables, the following four key words are provided:

- **?key_list_tag?**
- **?key_list_output?**
- **?key_list_value?**
- **?key_list_dim?**

?key_list_tag?

Measurement loop designation

?key_list_tag? stands for listing of short designations of all measurement loops in VEGA systems. If **?key_m_tag?** is found within a table or a list, the table/list will be extended by the number of lines according to the measurement loops available. Outside a table, **?key_list_tag?** just lists all tag names. ¹⁾

?key_list_tag("xyz")?

Measurement loop designation

With **?key_list_tag("xyz")?** the output of a specific measurement loop is forced, "xyz" stands for the tag name of the requested measurement loops (e.g. **?m_tag[LI3210+]? = "LI3210+" ¹⁾**

?key_list_tag("a"-"d")?

Measurement loop designation

With **?key_list_tag("abc"-"def")?** the output of a specific measurement loop is forced, "a" and "d" stands for the first letters of the requested measurement loops (e.g. **?m_list_tag["a"-"d"]? = "Used oil", "Bier", "Diesel 2" ¹⁾**

?key_list_output?

Index (DCS output)

?key_list_output? stands for listing of all indices of the DCS values which are transferred to the DCS system. If **?pls_output?** is found within a table or list, the table/list will be extended by the number of lines according to the measurement loops available. ¹⁾

?key_list_output(n,m)?

Index (DCS output)

?key_list_output(n,m)? stands for the index (number) of the DCS value which should be listed. Examples: **?pls_output(1,3)?** or **?pls_output(4,8)? ^{1) 2)}**

?key_list_output(n-m)?

Index (DCS output)

?key_list_output(n-m)? stands for listing of all indices of the DCS values within the limits "n" to "m". Examples: ?pls_output(1-15)? or ?pls_output(16-30)?; ^{1) 2)}

?key_list_value?

Value (DCS output)

Measured value which should be transferred to a DCS system.

?key_list_value? adds the appropriate measured value to a previously defined tag or DCS output within a list or table.

?key_list_dim?

Unit (DCS output)

Measuring unit of a measured value which should be transferred to a DCS system. **?key_list_value?** adds the appropriate measuring unit to a previously defined tag or DCS output within a list or table.

- ¹⁾ If both key words ?key_list_tag? and ?key_list_output? are found within a table or list line, the sorting sequence is determined by the one occurring at first.
Sorting sequence at ?key_list_tag?: rising according to tag names (a, A, b, B, c, C, ...)
Sorting sequence at ?key_list_output?: rising according to DCS output numbers (1, 2 3, 4, ...)
- ²⁾ The statement of the DCS output with VEGAMET is made in format (D.P), for which is valid:
D = DISBUS address
P = DCS output.
The statement of the DCS output with VEGALOG is made in format (P), for which is valid:
P = DCS output.

Measured value key words for specific individual measured values

For special applications in which specific individual measured values are to be presented on web pages, the following key words are available:

- **?key_tag[]?**
- **?key_output[]?**
- **?key_value[]?**
- **?key_dim[]?**

Square brackets must always be entered. By stating a DCS output within a square bracket, the requested value of the key word is specified.

Special feature:

If several key words of the above-mentioned type are used within a context, the DCS output must be specified only for the first one. All following key words of the above-mentioned type use this DCS output until redefinition.

?key_tag[]?

Measurement loop designation

?key_tag[]? stands for the output of a short designation of the measurement loop specified by the DCS output.
?key_tag[x]? delivers the tag name belonging to DCS output x.
?key_tag[]? delivers the tag name belonging to the DCS output specified in one of the previous key words.

?key_output[]?

Measurement loop designation

?key_output[]? stands for the output of a DCS output.
?key_output[x]? delivers the DCS output belonging to DCS output x, i.e. itself.
?key_output[]? delivers the DCS output belonging to the DCS output specified in one of the previous key words.

?key_value[]?

Measurement loop designation

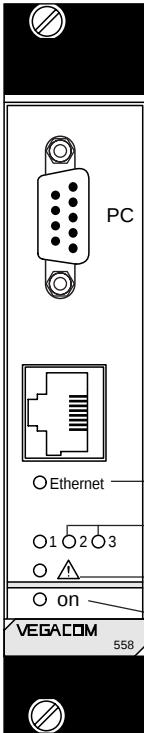
?key_value[]? stands for the output of the measured value of the measurement loops specified by the DCS output.
?key_value[x]? delivers the measured value belonging to DCS output x.
?key_value[]? delivers the tag name belonging to the DCS output specified in one of the previous key words.

?key_dim[]?

Measurement loop designation

?key_dim[]? stands for output of the measuring unit of the measurement loop specified by the DCS output.
?key_dim[x]? delivers the measuring unit belonging to DCS output x.
?key_dim[]? delivers the measuring unit belonging to the DCS output specified in one of the previous key words.

9 Diagnosis



Green LED (Ethernet):
lights with bus activity

Green LEDs:
show LOGBUS/DISBUS connection

Red LED:
flashes or lights in case of failure

Green LED (on):
lights in standard operation

LED (Ethernet)

- flashes green, if there is a connection to Hub or another bus participant

LED (1)

- lights green, while data are written in the memory (Flash) of VEGACOM

LED (2)

- lights green during connection to LOGBUS

LED (3)

- lights green during connection to DISBUS

LED (!)

- LED flashes:
no measurement loop created up to now.
- LED lights permanently:
communication problems or instrument error.

LED (on)

- lights when power supply is on (standard operation).

Supplement A Complete overview of the process image of measured values in VEGACOM 558:

Register word address in Modicon	VEGALOG	Sorting acc. to VEGAMET	Sorting acc. to channels / DCS indices
		VEGAMET 513 514, 515, 614	VEGAMET 513 514, 515, 615
30.001	DCS 1	-	-
30.003	DCS 2	-	DCS1 MET1
30.005	DCS 3	-	DCS1 MET2
30.007	DCS 4	-	DCS1 MET3
30.009	DCS 5	-	DCS1 MET4
30.011	DCS 6	-	DCS1 MET5
30.013	DCS 7	-	DCS1 MET6
30.015	DCS 8	MET1 DCS1	DCS1 MET7
30.017	DCS 9	MET1 DCS2	DCS1 MET8
30.019	DCS 10	MET1 DCS3	DCS1 MET9
30.021	DCS 11	MET1 DCS4	DCS1 MET10
30.023	DCS 12	MET1 DCS5	DCS1 MET11
30.025	DCS 13	MET1 DCS6	DCS1 MET12
30.027	DCS 14	MET1 DCS7	DCS1 MET13
30.029	DCS 15	MET2 DCS1	DCS1 MET14
30.031	DCS 16	MET2 DCS2	DCS1 MET15
30.033	DCS 17	MET2 DCS3	-
30.035	DCS 18	MET2 DCS4	DCS2 MET1
30.037	DCS 19	MET2 DCS5	DCS2 MET2
30.039	DCS 20	MET2 DCS6	DCS2 MET3
30.041	DCS 21	MET2 DCS7	DCS2 MET4
30.043	DCS 22	MET3 DCS1	DCS2 MET5
30.045	DCS 23	MET3 DCS2	DCS2 MET6
30.047	DCS 24	MET3 DCS3	DCS2 MET7
30.049	DCS 25	MET3 DCS4	DCS2 MET8
30.051	DCS 26	MET3 DCS5	DCS2 MET9
30.053	DCS 27	MET3 DCS6	DCS2 MET10
30.055	DCS 28	MET3 DCS7	DCS2 MET11
30.057	DCS 29	MET4 DCS1	DCS2 MET12
30.059	DCS 30	MET4 DCS2	DCS2 MET13
30.061	DCS 31	MET4 DCS3	DCS2 MET14
30.063	DCS 32	MET4 DCS4	DCS2 MET15
30.065	DCS 33	MET4 DCS5	-
30.067	DCS 34	MET4 DCS6	DCS3 MET1
30.069	DCS 35	MET4 DCS7	DCS3 MET2
30.071	DCS 36	MET5 DCS1	DCS3 MET3
30.073	DCS 37	MET5 DCS2	DCS3 MET4
30.075	DCS 38	MET5 DCS3	DCS3 MET5
30.077	DCS 39	MET5 DCS4	DCS3 MET6
30.079	DCS 40	MET5 DCS5	DCS3 MET7
30.081	DCS 41	MET5 DCS6	DCS3 MET8
30.083	DCS 42	MET5 DCS7	DCS3 MET9
30.085	DCS 43	MET6 DCS1	DCS3 MET10
30.087	DCS 44	MET6 DCS2	DCS3 MET11

Register word address in Modicon	VEGALOG	Sorting acc. to VEGAMET addresses	Sorting acc. to channels / DCS indices
		VEGAMET 513 514, 515, 614	VEGAMET 513 514, 515, 614
30.089	DCS 45	MET6 DCS3	DCS3 MET12
30.091	DCS 46	MET6 DCS4	DCS3 MET13
30.093	DCS 47	MET6 DCS5	DCS3 MET14
30.095	DCS 48	MET6 DCS6	DCS3 MET15
30.097	DCS 49	MET6 DCS7	-
30.099	DCS 50	MET7 DCS1	DCS4 MET1
30.101	DCS 51	MET7 DCS2	DCS4 MET2
30.103	DCS 52	MET7 DCS3	DCS4 MET3
30.105	DCS 53	MET7 DCS4	DCS4 MET4
30.107	DCS 54	MET7 DCS5	DCS4 MET5
30.109	DCS 55	MET7 DCS6	DCS4 MET6
30.111	DCS 56	MET7 DCS7	DCS4 MET7
30.113	DCS 57	MET8 DCS1	DCS4 MET8
30.115	DCS 58	MET8 DCS2	DCS4 MET9
30.117	DCS 59	MET8 DCS3	DCS4 MET10
30.119	DCS 60	MET8 DCS4	DCS4 MET11
30.121	DCS 61	MET8 DCS5	DCS4 MET12
30.123	DCS 62	MET8 DCS6	DCS4 MET13
30.125	DCS 63	MET8 DCS7	DCS4 MET14
30.127	DCS 64	MET9 DCS1	DCS4 MET15
30.129	DCS 65	MET9 DCS2	-
30.131	DCS 66	MET9 DCS3	DCS5 MET1
30.133	DCS 67	MET9 DCS4	DCS5 MET2
30.135	DCS 68	MET9 DCS5	DCS5 MET3
30.137	DCS 69	MET9 DCS6	DCS5 MET4
30.139	DCS 70	MET9 DCS7	DCS5 MET5
30.141	DCS 71	MET10 DCS1	DCS5 MET6
30.143	DCS 72	MET10 DCS2	DCS5 MET7
30.145	DCS 73	MET10 DCS3	DCS5 MET8
30.147	DCS 74	MET10 DCS4	DCS5 MET9
30.149	DCS 75	MET10 DCS5	DCS5 MET10
30.151	DCS 76	MET10 DCS6	DCS5 MET11
30.153	DCS 77	MET10 DCS7	DCS5 MET12
30.155	DCS 78	MET11 DCS1	DCS5 MET13
30.157	DCS 79	MET11 DCS2	DCS5 MET14
30.159	DCS 80	MET11 DCS3	DCS5 MET15
30.161	DCS 81	MET11 DCS4	-
30.163	DCS 82	MET11 DCS5	DCS6 MET1
30.165	DCS 83	MET11 DCS6	DCS6 MET2
30.167	DCS 84	MET11 DCS7	DCS6 MET3
30.169	DCS 85	MET12 DCS1	DCS6 MET4
30.171	DCS 86	MET12 DCS2	DCS6 MET5
30.173	DCS 87	MET12 DCS3	DCS6 MET6
30.175	DCS 88	MET12 DCS4	DCS6 MET7
30.177	DCS 89	MET12 DCS5	DCS6 MET8

Register word address in Modicon	VEGALOG	Sorting acc. to VEGAMET addresses	Sorting acc. to channels / DCS indices
		VEGAMET 513, 514, 515, 614	VEGAMET 513 514, 515, 614
30.179	DCS 90	MET12 DCS6	DCS6 MET9
30.181	DCS 91	MET12 DCS7	DCS6 MET10
30.183	DCS 92	MET13 DCS1	DCS6 MET11
30.185	DCS 93	MET13 DCS2	DCS6 MET12
30.187	DCS 94	MET13 DCS3	DCS6 MET13
30.189	DCS 95	MET13 DCS4	DCS6 MET14
30.191	DCS 96	MET13 DCS5	DCS6 MET15
30.193	DCS 97	MET13 DCS6	-
30.195	DCS 98	MET13 DCS7	DCS7 MET1
30.197	DCS 99	MET14 DCS1	DCS7 MET2
30.199	DCS 100	MET14 DCS2	DCS7 MET3
30.201	DCS 101	MET14 DCS3	DCS7 MET4
30.203	DCS 102	MET14 DCS4	DCS7 MET5
30.205	DCS 103	MET14 DCS5	DCS7 MET6
30.207	DCS 104	MET14 DCS6	DCS7 MET7
30.209	DCS 105	MET14 DCS7	DCS7 MET8
30.211	DCS 106	MET15 DCS1	DCS7 MET9
30.213	DCS 107	MET15 DCS2	DCS7 MET10
30.215	DCS 108	MET15 DCS3	DCS7 MET11
30.217	DCS 109	MET15 DCS4	DCS7 MET12
30.219	DCS 110	MET15 DCS5	DCS7 MET13
30.221	DCS 111	MET15 DCS6	DCS7 MET14
30.223	DCS 112	MET15 DCS7	DCS7 MET15
30.225	DCS 113	-	-
30.227	DCS 114	-	-
30.229	DCS 115	-	-
30.231	DCS 116	-	-
30.233	DCS 117	-	-
30.235	DCS 118	-	-
30.237	DCS 119	-	-
30.239	DCS 120	-	-
30.241	DCS 121	-	-
30.243	DCS 122	-	-
30.245	DCS 123	-	-
30.247	DCS 124	-	-
30.249	DCS 125	-	-
30.251	DCS 126	-	-
30.253	DCS 127	-	-
30.255	DCS 128	-	-
30.257	DCS 129	-	-
30.259	DCS 130	-	-
30.261	DCS 131	-	-
30.263	DCS 132	-	-
30.265	DCS 133	-	-
30.267	DCS 134	-	-

Register word address in Modicon	VEGALOG	Sorting acc. to VEGAMET	Sorting acc. to channels / DCS indices
		VEGAMET 513 514, 515, 614	VEGAMET 513 514, 515, 614
30.269	DCS 135	-	-
30.271	DCS 136	-	-
30.273	DCS 137	-	-
30.275	DCS 138	-	-
30.277	DCS 139	-	-
30.279	DCS 140	-	-
30.281	DCS 141	-	-
30.283	DCS 142	-	-
30.285	DCS 143	-	-
30.287	DCS 144	-	-
30.289	DCS 145	-	-
30.291	DCS 146	-	-
30.293	DCS 147	-	-
30.295	DCS 148	-	-
30.297	DCS 149	-	-
30.299	DCS 150	-	-
30.301	DCS 151	-	-
30.303	DCS 152	-	-
30.305	DCS 153	-	-
30.307	DCS 154	-	-
30.309	DCS 155	-	-
30.311	DCS 156	-	-
30.313	DCS 157	-	-
30.315	DCS 158	-	-
30.317	DCS 159	-	-
30.319	DCS 160	-	-
30.321	DCS 161	-	-
30.323	DCS 162	-	-
30.325	DCS 163	-	-
30.327	DCS 164	-	-
30.329	DCS 165	-	-
30.331	DCS 166	-	-
30.333	DCS 167	-	-
30.335	DCS 168	-	-
30.337	DCS 169	-	-
30.339	DCS 170	-	-
30.341	DCS 171	-	-
30.343	DCS 172	-	-
30.345	DCS 173	-	-
30.347	DCS 174	-	-
30.349	DCS 175	-	-
30.351	DCS 176	-	-
30.353	DCS 177	-	-
30.355	DCS 178	-	-
30.357	DCS 179	-	-

Register word address in Modicon	VEGALOG	Sorting acc. to VEGAMET addresses	Sorting acc. to channels / DCS indices
		VEGAMET 513, 514, 515, 614	VEGAMET 513 514, 515, 614
30.359	DCS 180	-	-
30.361	DCS 181	-	-
30.363	DCS 182	-	-
30.365	DCS 183	-	-
30.367	DCS 184	-	-
30.369	DCS 185	-	-
30.371	DCS 186	-	-
30.373	DCS 187	-	-
30.375	DCS 188	-	-
30.377	DCS 189	-	-
30.379	DCS 190	-	-
30.381	DCS 191	-	-
30.383	DCS 192	-	-
30.385	DCS 193	-	-
30.387	DCS 194	-	-
30.389	DCS 195	-	-
30.391	DCS 196	-	-
30.393	DCS 197	-	-
30.395	DCS 198	-	-
30.397	DCS 199	-	-
30.399	DCS 200	-	-
30.401	DCS 201	-	-
30.403	DCS 202	-	-
30.405	DCS 203	-	-
30.407	DCS 204	-	-
30.409	DCS 205	-	-
30.411	DCS 206	-	-
30.413	DCS 207	-	-
30.415	DCS 208	-	-
30.417	DCS 209	-	-
30.419	DCS 210	-	-
30.421	DCS 211	-	-
30.423	DCS 212	-	-
30.425	DCS 213	-	-
30.427	DCS 214	-	-
30.429	DCS 215	-	-
30.431	DCS 216	-	-
30.433	DCS 217	-	-
30.435	DCS 218	-	-
30.437	DCS 219	-	-
30.439	DCS 220	-	-
30.441	DCS 221	-	-
30.443	DCS 222	-	-
30.445	DCS 223	-	-
30.447	DCS 224	-	-

Register word address in Modicon	VEGALOG	Sorting acc. to VEGAMET addresses	Sorting acc. to channels / DCS indices
		VEGAMET 513 514, 515, 614	VEGAMET 513 514, 515, 614
30.449	DCS 225	-	-
30.451	DCS 226	-	-
30.453	DCS 227	-	-
30.455	DCS 228	-	-
30.457	DCS 229	-	-
30.459	DCS 230	-	-
30.461	DCS 231	-	-
30.463	DCS 232	-	-
30.465	DCS 233	-	-
30.467	DCS 234	-	-
30.469	DCS 235	-	-
30.471	DCS 236	-	-
30.473	DCS 237	-	-
30.475	DCS 238	-	-
30.477	DCS 239	-	-
30.479	DCS 240	-	-
30.481	DCS 241	-	-
30.483	DCS 242	-	-
30.485	DCS 243	-	-
30.487	DCS 244	-	-
30.489	DCS 245	-	-
30.491	DCS 246	-	-
30.493	DCS 247	-	-
30.495	DCS 248	-	-
30.497	DCS 249	-	-
30.499	DCS 250	-	-
30.501	DCS 251	-	-
30.503	DCS 252	-	-
30.505	DCS 253	-	-
30.507	DCS 254	-	-
30.509	DCS 255	-	-

Supplement B Complete overview of the process image of switching status in VEGACOM 558:

Register bit address in Modicon	VEGALOG		VEGAMET 513, 514, 515, 614	
	Module no.	No. of output	DISBUS address	Status / Switching status
10.001	#1	Output contact 9	VEGAMET #1	Input contact 2
10.002	#1	Output contact 10	VEGAMET #1	Input contact 1
10.003	#1	-	VEGAMET #1	-
10.004	#1	-	VEGAMET #1	-
10.005	#1	-	VEGAMET #1	-
10.006	#1	-	VEGAMET #1	-
10.007	#1	-	VEGAMET #1	-
10.008	#1	Status: Card	VEGAMET #1	Status of inputs
10.009	#1	Output contact 1	VEGAMET #1	Relay contact 1
10.010	#1	Output contact 2	VEGAMET #1	Relay contact 2
10.011	#1	Output contact 3	VEGAMET #1	Fail safe relay
10.012	#1	Output contact 4	VEGAMET #1	-
10.013	#1	Output contact 5	VEGAMET #1	-
10.014	#1	Output contact 6	VEGAMET #1	-
10.015	#1	Output contact 7	VEGAMET #1	-
10.016	#1	Output contact 8	VEGAMET #1	Status of outputs
10.017	#2	Output contact 9	VEGAMET #2	Input contact 2
10.018	#2	Output contact 10	VEGAMET #2	Input contact 1
10.019	#2	-	VEGAMET #2	-
10.020	#2	-	VEGAMET #2	-
10.021	#2	-	VEGAMET #2	-
10.022	#2	-	VEGAMET #2	-
10.023	#2	-	VEGAMET #2	-
10.024	#2	Status: Card	VEGAMET #2	Status of inputs
10.025	#2	Output contact 1	VEGAMET #2	Relay contact 1
10.026	#2	Output contact 2	VEGAMET #2	Relay contact 2
10.027	#2	Output contact 3	VEGAMET #2	Fail safe relay
10.028	#2	Output contact 4	VEGAMET #2	-
10.029	#2	Output contact 5	VEGAMET #2	-
10.030	#2	Output contact 6	VEGAMET #2	-
10.031	#2	Output contact 7	VEGAMET #2	-
10.032	#2	Output contact 8	VEGAMET #2	Status of outputs
10.033	#3	Output contact 9	VEGAMET #3	Input contact 2
10.034	#3	Output contact 10	VEGAMET #3	Input contact 1
10.035	#3	-	VEGAMET #3	-
10.036	#3	-	VEGAMET #3	-
10.037	#3	-	VEGAMET #3	-
10.038	#3	-	VEGAMET #3	-
10.039	#3	-	VEGAMET #3	-
10.040	#3	Status: Card	VEGAMET #3	Status of inputs
10.041	#3	Output contact 1	VEGAMET #3	Relay contact 1
10.042	#3	Output contact 2	VEGAMET #3	Relay contact 2
10.043	#3	Output contact 3	VEGAMET #3	Fail safe relay
10.044	#3	Output contact 4	VEGAMET #3	-

Register word address in Modicon	VEGALOG		VEGAMET 513, 514, 515, 614	
	Module no.	No. of output	DISBUS address	Status / Switching status
10.045	#3	Output contact 5	VEGAMET #3	-
10.046	#3	Output contact 6	VEGAMET #3	-
10.047	#3	Output contact 7	VEGAMET #3	-
10.048	#3	Output contact 8	VEGAMET #3	Status of outputs
10.049	#4	Output contact 9	VEGAMET #4	Input contact 2
10.050	#4	Output contact 10	VEGAMET #4	Input contact 1
10.051	#4	-	VEGAMET #4	-
10.052	#4	-	VEGAMET #4	-
10.053	#4	-	VEGAMET #4	-
10.054	#4	-	VEGAMET #4	-
10.055	#4	-	VEGAMET #4	-
10.056	#4	Status: Card	VEGAMET #4	Status of inputs
10.057	#4	Output contact 1	VEGAMET #4	Relay contact 1
10.058	#4	Output contact 2	VEGAMET #4	Relay contact 2
10.059	#4	Output contact 3	VEGAMET #4	Fail safe relay
10.060	#4	Output contact 4	VEGAMET #4	-
10.061	#4	Output contact 5	VEGAMET #4	-
10.062	#4	Output contact 6	VEGAMET #4	-
10.063	#4	Output contact 7	VEGAMET #4	-
10.064	#4	Output contact 8	VEGAMET #4	Status of outputs
10.065	#5	Output contact 9	VEGAMET #5	Input contact 2
10.066	#5	Output contact 10	VEGAMET #5	Input contact 1
10.067	#5	-	VEGAMET #5	-
10.068	#5	-	VEGAMET #5	-
10.069	#5	-	VEGAMET #5	-
10.070	#5	-	VEGAMET #5	-
10.071	#5	-	VEGAMET #5	-
10.072	#5	Status: Card	VEGAMET #5	Status of inputs
10.073	#5	Output contact 1	VEGAMET #5	Relay contact 1
10.074	#5	Output contact 2	VEGAMET #5	Relay contact 2
10.075	#5	Output contact 3	VEGAMET #5	Fail safe relay
10.076	#5	Output contact 4	VEGAMET #5	-
10.077	#5	Output contact 5	VEGAMET #5	-
10.078	#5	Output contact 6	VEGAMET #5	-
10.079	#5	Output contact 7	VEGAMET #5	-
10.080	#5	Output contact 8	VEGAMET #5	Status of outputs
10.081	#6	Output contact 9	VEGAMET #6	Input contact 2
10.082	#6	Output contact 10	VEGAMET #6	Input contact 1
10.083	#6	-	VEGAMET #6	-
10.084	#6	-	VEGAMET #6	-
10.085	#6	-	VEGAMET #6	-
10.086	#6	-	VEGAMET #6	-
10.087	#6	-	VEGAMET #6	-
10.088	#6	Status: Card	VEGAMET #6	Status of inputs
10.089	#6	Output contact 1	VEGAMET #6	Relay contact 1

Register word address in Modicon	VEGALOG		VEGAMET 513, 514, 515, 614	
	Module no.	No. of output	DISBUS address	Status / Switching status
10.090	#6	Output contact 2	VEGAMET #6	Relay contact 2
10.091	#6	Output contact 3	VEGAMET #6	Fail safe relay
10.092	#6	Output contact 4	VEGAMET #6	-
10.093	#6	Output contact 5	VEGAMET #6	-
10.094	#6	Output contact 6	VEGAMET #6	-
10.095	#6	Output contact 7	VEGAMET #6	-
10.096	#6	Output contact 8	VEGAMET #6	Status of outputs
10.097	#7	Output contact 9	VEGAMET #7	Input contact 2
10.098	#7	Output contact 10	VEGAMET #7	Input contact 1
10.099	#7	-	VEGAMET #7	-
10.100	#7	-	VEGAMET #7	-
10.101	#7	-	VEGAMET #7	-
10.102	#7	-	VEGAMET #7	-
10.103	#7	-	VEGAMET #7	-
10.104	#7	Status: Card	VEGAMET #7	Status of inputs
10.105	#7	Output contact 1	VEGAMET #7	Relay contact 1
10.106	#7	Output contact 2	VEGAMET #7	Relay contact 2
10.107	#7	Output contact 3	VEGAMET #7	Fail safe relay
10.108	#7	Output contact 4	VEGAMET #7	-
10.109	#7	Output contact 5	VEGAMET #7	-
10.110	#7	Output contact 6	VEGAMET #7	-
10.111	#7	Output contact 7	VEGAMET #7	-
10.112	#7	Output contact 8	VEGAMET #7	Status of outputs
10.113	#8	Output contact 9	VEGAMET #8	Input contact 2
10.114	#8	Output contact 10	VEGAMET #8	Input contact 1
10.115	#8	-	VEGAMET #8	-
10.116	#8	-	VEGAMET #8	-
10.117	#8	-	VEGAMET #8	-
10.118	#8	-	VEGAMET #8	-
10.119	#8	-	VEGAMET #8	-
10.120	#8	Status: Card	VEGAMET #8	Status of inputs
10.121	#8	Output contact 1	VEGAMET #8	Relay contact 1
10.122	#8	Output contact 2	VEGAMET #8	Relay contact 2
10.123	#8	Output contact 3	VEGAMET #8	Fail safe relay
10.124	#8	Output contact 4	VEGAMET #8	-
10.125	#8	Output contact 5	VEGAMET #8	-
10.126	#8	Output contact 6	VEGAMET #8	-
10.127	#8	Output contact 7	VEGAMET #8	-
10.128	#8	Output contact 8	VEGAMET #8	Status of outputs
10.129	#9	Output contact 9	VEGAMET #9	Input contact 2
10.130	#9	Output contact 10	VEGAMET #9	Input contact 1
10.131	#9	-	VEGAMET #9	-
10.132	#9	-	VEGAMET #9	-
10.133	#9	-	VEGAMET #9	-
10.134	#9	-	VEGAMET #9	-

Register word address in Modicon	VEGALOG		VEGAMET 513, 514, 515, 614	
	Module no.	No. of output	DISBUS address	Status / Switching status
10.135	#9	-	VEGAMET #9	-
10.136	#9	Status: Card	VEGAMET #9	Status of inputs
10.137	#9	Output contact 1	VEGAMET #9	Relay contact 1
10.138	#9	Output contact 2	VEGAMET #9	Relay contact 2
10.139	#9	Output contact 3	VEGAMET #9	Fail safe relay
10.140	#9	Output contact 4	VEGAMET #9	-
10.141	#9	Output contact 5	VEGAMET #9	-
10.142	#9	Output contact 6	VEGAMET #9	-
10.143	#9	Output contact 7	VEGAMET #9	-
10.144	#9	Output contact 8	VEGAMET #9	Status of outputs
10.145	#10	Output contact 9	VEGAMET #10	Input contact 2
10.146	#10	Output contact 10	VEGAMET #10	Input contact 1
10.147	#10	-	VEGAMET #10	-
10.148	#10	-	VEGAMET #10	-
10.149	#10	-	VEGAMET #10	-
10.150	#10	-	VEGAMET #10	-
10.151	#10	-	VEGAMET #10	-
10.152	#10	Status: Card	VEGAMET #10	Status of inputs
10.153	#10	Output contact 1	VEGAMET #10	Relay contact 1
10.154	#10	Output contact 2	VEGAMET #10	Relay contact 2
10.155	#10	Output contact 3	VEGAMET #10	Fail safe relay
10.156	#10	Output contact 4	VEGAMET #10	-
10.157	#10	Output contact 5	VEGAMET #10	-
10.158	#10	Output contact 6	VEGAMET #10	-
10.159	#10	Output contact 7	VEGAMET #10	-
10.160	#10	Output contact 8	VEGAMET #10	Status of outputs
10.161	#11	Output contact 9	VEGAMET #11	Input contact 2
10.162	#11	Output contact 10	VEGAMET #11	Input contact 1
10.163	#11	-	VEGAMET #11	-
10.164	#11	-	VEGAMET #11	-
10.165	#11	-	VEGAMET #11	-
10.166	#11	-	VEGAMET #11	-
10.167	#11	-	VEGAMET #11	-
10.168	#11	Status: Card	VEGAMET #11	Status of inputs
10.169	#11	Output contact 1	VEGAMET #11	Relay contact 1
10.170	#11	Output contact 2	VEGAMET #11	Relay contact 2
10.171	#11	Output contact 3	VEGAMET #11	Fail safe relay
10.172	#11	Output contact 4	VEGAMET #11	-
10.173	#11	Output contact 5	VEGAMET #11	-
10.174	#11	Output contact 6	VEGAMET #11	-
10.175	#11	Output contact 7	VEGAMET #11	-
10.176	#11	Output contact 8	VEGAMET #11	Status of outputs
10.177	#12	Output contact 9	VEGAMET #12	Input contact 2
10.178	#12	Output contact 10	VEGAMET #12	Input contact 1
10.179	#12	-	VEGAMET #12	-

Register word address in Modicon	VEGALOG		VEGAMET 513, 514, 515, 614	
	Module no.	No. of output	DISBUS address	Status / Switching status
10.180	#12	-	VEGAMET #12	-
10.181	#12	-	VEGAMET #12	-
10.182	#12	-	VEGAMET #12	-
10.183	#12	-	VEGAMET #12	-
10.184	#12	Status: Card	VEGAMET #12	Status of inputs
10.185	#12	Output contact 1	VEGAMET #12	Relay contact 1
10.186	#12	Output contact 2	VEGAMET #12	Relay contact 2
10.187	#12	Output contact 3	VEGAMET #12	Fail safe relay
10.188	#12	Output contact 4	VEGAMET #12	-
10.189	#12	Output contact 5	VEGAMET #12	-
10.190	#12	Output contact 6	VEGAMET #12	-
10.191	#12	Output contact 7	VEGAMET #12	-
10.192	#12	Output contact 8	VEGAMET #12	Status of outputs
10.193	#13	Output contact 9	VEGAMET #13	Input contact 2
10.194	#13	Output contact 10	VEGAMET #13	Input contact 1
10.195	#13	-	VEGAMET #13	-
10.196	#13	-	VEGAMET #13	-
10.197	#13	-	VEGAMET #13	-
10.198	#13	-	VEGAMET #13	-
10.199	#13	-	VEGAMET #13	-
10.200	#13	Status: Card	VEGAMET #13	Status of inputs
10.201	#13	Output contact 1	VEGAMET #13	Relay contact 1
10.202	#13	Output contact 2	VEGAMET #13	Relay contact 2
10.203	#13	Output contact 3	VEGAMET #13	Fail safe relay
10.204	#13	Output contact 4	VEGAMET #13	-
10.205	#13	Output contact 5	VEGAMET #13	-
10.206	#13	Output contact 6	VEGAMET #13	-
10.207	#13	Output contact 7	VEGAMET #13	-
10.208	#13	Output contact 8	VEGAMET #13	Status of outputs
10.209	#14	Output contact 9	VEGAMET #14	Input contact 2
10.210	#14	Output contact 10	VEGAMET #14	Input contact 1
10.211	#14	-	VEGAMET #14	-
10.212	#14	-	VEGAMET #14	-
10.213	#14	-	VEGAMET #14	-
10.214	#14	-	VEGAMET #14	-
10.215	#14	-	VEGAMET #14	-
10.216	#14	Status: Card	VEGAMET #14	Status of inputs
10.217	#14	Output contact 1	VEGAMET #14	Relay contact 1
10.218	#14	Output contact 2	VEGAMET #14	Relay contact 2
10.219	#14	Output contact 3	VEGAMET #14	Fail safe relay
10.220	#14	Output contact 4	VEGAMET #14	-
10.221	#14	Output contact 5	VEGAMET #14	-
10.222	#14	Output contact 6	VEGAMET #14	-
10.223	#14	Output contact 7	VEGAMET #14	-
10.224	#14	Output contact 8	VEGAMET #14	Status of outputs

Register word address in Modicon	VEGALOG		VEGAMET 513, 514, 515, 614	
	Module no.	No. of output	DISBUS address	Status / Switching status
10.225	#15	Output contact 9	VEGAMET #15	Input contact 2
10.226	#15	Output contact 10	VEGAMET #15	Input contact 1
10.227	#15	-	VEGAMET #15	-
10.228	#15	-	VEGAMET #15	-
10.229	#15	-	VEGAMET #15	-
10.230	#15	-	VEGAMET #15	-
10.231	#15	-	VEGAMET #15	-
10.232	#15	Status: Card	VEGAMET #15	Status of inputs
10.233	#15	Output contact 1	VEGAMET #15	Relay contact 1
10.234	#15	Output contact 2	VEGAMET #15	Relay contact 2
10.235	#15	Output contact 3	VEGAMET #15	Fail safe relay
10.236	#15	Output contact 4	VEGAMET #15	-
10.237	#15	Output contact 5	VEGAMET #15	-
10.238	#15	Output contact 6	VEGAMET #15	-
10.239	#15	Output contact 7	VEGAMET #15	-
10.240	#15	Output contact 8	VEGAMET #15	Status of outputs
10.241	#16	Output contact 9	-	-
10.242	#16	Output contact 10	-	-
10.243	#16	-	-	-
10.244	#16	-	-	-
10.245	#16	-	-	-
10.246	#16	-	-	-
10.247	#16	-	-	-
10.248	#16	Status: Card	-	-
10.249	#16	Output contact 1	-	-
10.250	#16	Output contact 2	-	-
10.251	#16	Output contact 3	-	-
10.252	#16	Output contact 4	-	-
10.253	#16	Output contact 5	-	-
10.254	#16	Output contact 6	-	-
10.255	#16	Output contact 7	-	-
10.256	#16	Output contact 8	-	-
10.257	#17	Output contact 9	-	-
10.258	#17	Output contact 10	-	-
10.259	#17	-	-	-
10.260	#17	-	-	-
10.261	#17	-	-	-
10.262	#17	-	-	-
10.263	#17	-	-	-
10.264	#17	Status: Card	-	-
10.265	#17	Output contact 1	-	-
10.266	#17	Output contact 2	-	-
10.267	#17	Output contact 3	-	-
10.268	#17	Output contact 4	-	-
10.269	#17	Output contact 5	-	-

Register word address in Modicon	VEGALOG		VEGAMET 513, 514, 515, 614	
	Module no.	No. of output	DISBUS address	Status / Switching status
10.270	#17	Output contact 6	-	-
10.271	#17	Output contact 7	-	-
10.272	#17	Output contact 8	-	-
10.273	#18	Output contact 9	-	-
10.274	#18	Output contact 10	-	-
10.275	#18	-	-	-
10.276	#18	-	-	-
10.277	#18	-	-	-
10.278	#18	-	-	-
10.279	#18	-	-	-
10.280	#18	Status: Card	-	-
10.281	#18	Output contact 1	-	-
10.282	#18	Output contact 2	-	-
10.283	#18	Output contact 3	-	-
10.284	#18	Output contact 4	-	-
10.285	#18	Output contact 5	-	-
10.286	#18	Output contact 6	-	-
10.287	#18	Output contact 7	-	-
10.288	#18	Output contact 8	-	-
10.289	#19	Output contact 9	-	-
10.290	#19	Output contact 10	-	-
10.291	#19	-	-	-
10.292	#19	-	-	-
10.293	#19	-	-	-
10.294	#19	-	-	-
10.295	#19	-	-	-
10.296	#19	Status: Card	-	-
10.297	#19	Output contact 1	-	-
10.298	#19	Output contact 2	-	-
10.299	#19	Output contact 3	-	-
10.300	#19	Output contact 4	-	-
10.301	#19	Output contact 5	-	-
10.302	#19	Output contact 6	-	-
10.303	#19	Output contact 7	-	-
10.304	#19	Output contact 8	-	-
10.305	#20	Output contact 9	-	-
10.306	#20	Output contact 10	-	-
10.307	#20	-	-	-
10.308	#20	-	-	-
10.309	#20	-	-	-
10.310	#20	-	-	-
10.311	#20	-	-	-
10.312	#20	Status: Card	-	-
10.313	#20	Output contact 1	-	-
10.314	#20	Output contact 2	-	-

Register word address in Modicon	VEGALOG		VEGAMET 513, 514, 515, 614	
	Module no.	No. of output	DISBUS address	Status / Switching status
10.315	#20	Output contact 3	-	-
10.316	#20	Output contact 4	-	-
10.317	#20	Output contact 5	-	-
10.318	#20	Output contact 6	-	-
10.319	#20	Output contact 7	-	-
10.320	#20	Output contact 8	-	-
10.321	#21	Output contact 9	-	-
10.322	#21	Output contact 10	-	-
10.323	#21	-	-	-
10.324	#21	-	-	-
10.325	#21	-	-	-
10.326	#21	-	-	-
10.327	#21	-	-	-
10.328	#21	Status: Card	-	-
10.329	#21	Output contact 1	-	-
10.330	#21	Output contact 2	-	-
10.331	#21	Output contact 3	-	-
10.332	#21	Output contact 4	-	-
10.333	#21	Output contact 5	-	-
10.334	#21	Output contact 6	-	-
10.335	#21	Output contact 7	-	-
10.336	#21	Output contact 8	-	-
10.337	#22	Output contact 9	-	-
10.338	#22	Output contact 10	-	-
10.339	#22	-	-	-
10.340	#22	-	-	-
10.341	#22	-	-	-
10.342	#22	-	-	-
10.343	#22	-	-	-
10.344	#22	Status: Card	-	-
10.345	#22	Output contact 1	-	-
10.346	#22	Output contact 2	-	-
10.347	#22	Output contact 3	-	-
10.348	#22	Output contact 4	-	-
10.349	#22	Output contact 5	-	-
10.350	#22	Output contact 6	-	-
10.351	#22	Output contact 7	-	-
10.352	#22	Output contact 8	-	-
10.353	#23	Output contact 9	-	-
10.354	#23	Output contact 10	-	-
10.355	#23	-	-	-
10.356	#23	-	-	-
10.357	#23	-	-	-
10.358	#23	-	-	-
10.359	#23	-	-	-

Register word address in Modicon	VEGALOG		VEGAMET 513, 514, 515, 614	
	Module no.	No. of output	DISBUS address	Status / Switching status
10.360	#23	Status: Card	-	-
10.361	#23	Output contact 1	-	-
10.362	#23	Output contact 2	-	-
10.363	#23	Output contact 3	-	-
10.364	#23	Output contact 4	-	-
10.365	#23	Output contact 5	-	-
10.366	#23	Output contact 6	-	-
10.367	#23	Output contact 7	-	-
10.368	#23	Output contact 8	-	-
10.369	#24	Output contact 9	-	-
10.370	#24	Output contact 10	-	-
10.371	#24	-	-	-
10.372	#24	-	-	-
10.373	#24	-	-	-
10.374	#24	-	-	-
10.375	#24	-	-	-
10.376	#24	Status: Card	-	-
10.377	#24	Output contact 1	-	-
10.378	#24	Output contact 2	-	-
10.379	#24	Output contact 3	-	-
10.380	#24	Output contact 4	-	-
10.381	#24	Output contact 5	-	-
10.382	#24	Output contact 6	-	-
10.383	#24	Output contact 7	-	-
10.384	#24	Output contact 8	-	-
10.385	#25	Output contact 9	-	-
10.386	#25	Output contact 10	-	-
10.387	#25	-	-	-
10.388	#25	-	-	-
10.389	#25	-	-	-
10.390	#25	-	-	-
10.391	#25	-	-	-
10.392	#25	Status: Card	-	-
10.393	#25	Output contact 1	-	-
10.394	#25	Output contact 2	-	-
10.395	#25	Output contact 3	-	-
10.396	#25	Output contact 4	-	-
10.397	#25	Output contact 5	-	-
10.398	#25	Output contact 6	-	-
10.399	#25	Output contact 7	-	-
10.400	#25	Output contact 8	-	-
10.401	#26	Output contact 9	-	-
10.402	#26	Output contact 10	-	-
10.403	#26	-	-	-
10.404	#26	-	-	-

Register word address in Modicon	VEGALOG		VEGAMET 513, 514, 515, 614	
	Module no.	No. of output	DISBUS address	Status / Switching status
10.405	#26	-	-	-
10.406	#26	-	-	-
10.407	#26	-	-	-
10.408	#26	Status: Card	-	-
10.409	#26	Output contact 1	-	-
10.410	#26	Output contact 2	-	-
10.411	#26	Output contact 3	-	-
10.412	#26	Output contact 4	-	-
10.413	#26	Output contact 5	-	-
10.414	#26	Output contact 6	-	-
10.415	#26	Output contact 7	-	-
10.416	#26	Output contact 8	-	-
10.417	#27	Output contact 9	-	-
10.418	#27	Output contact 10	-	-
10.419	#27	-	-	-
10.420	#27	-	-	-
10.421	#27	-	-	-
10.422	#27	-	-	-
10.423	#27	-	-	-
10.424	#27	Status: Card	-	-
10.425	#27	Output contact 1	-	-
10.426	#27	Output contact 2	-	-
10.427	#27	Output contact 3	-	-
10.428	#27	Output contact 4	-	-
10.429	#27	Output contact 5	-	-
10.430	#27	Output contact 6	-	-
10.431	#27	Output contact 7	-	-
10.432	#27	Output contact 8	-	-
10.433	#28	Output contact 9	-	-
10.434	#28	Output contact 10	-	-
10.435	#28	-	-	-
10.436	#28	-	-	-
10.437	#28	-	-	-
10.438	#28	-	-	-
10.439	#28	-	-	-
10.440	#28	Status: Card	-	-
10.441	#28	Output contact 1	-	-
10.442	#28	Output contact 2	-	-
10.443	#28	Output contact 3	-	-
10.444	#28	Output contact 4	-	-
10.445	#28	Output contact 5	-	-
10.446	#28	Output contact 6	-	-
10.447	#28	Output contact 7	-	-
10.448	#28	Output contact 8	-	-
10.449	#29	Output contact 9	-	-

Register word address in Modicon	VEGALOG		VEGAMET 513, 514, 515, 614	
	Module no.	No. of output	DISBUS address	Status / Switching statu
10.450	#29	Output contact 10	-	-
10.451	#29	-	-	-
10.452	#29	-	-	-
10.453	#29	-	-	-
10.454	#29	-	-	-
10.455	#29	-	-	-
10.456	#29	Status: Card	-	-
10.457	#29	Output contact 1	-	-
10.458	#29	Output contact 2	-	-
10.459	#29	Output contact 3	-	-
10.460	#29	Output contact 4	-	-
10.461	#29	Output contact 5	-	-
10.462	#29	Output contact 6	-	-
10.463	#29	Output contact 7	-	-
10.464	#29	Output contact 8	-	-
10.465	#30	Output contact 9	-	-
10.466	#30	Output contact 10	-	-
10.467	#30	-	-	-
10.468	#30	-	-	-
10.469	#30	-	-	-
10.470	#30	-	-	-
10.471	#30	-	-	-
10.472	#30	Status: Card	-	-
10.473	#30	Output contact 1	-	-
10.474	#30	Output contact 2	-	-
10.475	#30	Output contact 3	-	-
10.476	#30	Output contact 4	-	-
10.477	#30	Output contact 5	-	-
10.478	#30	Output contact 6	-	-
10.479	#30	Output contact 7	-	-
10.480	#30	Output contact 8	-	-
10.481	#31	Output contact 9	-	-
10.482	#31	Output contact 10	-	-
10.483	#31	-	-	-
10.484	#31	-	-	-
10.485	#31	-	-	-
10.486	#31	-	-	-
10.487	#31	-	-	-
10.488	#31	Status: Card	-	-
10.489	#31	Output contact 1	-	-
10.490	#31	Output contact 2	-	-
10.491	#31	Output contact 3	-	-
10.492	#31	Output contact 4	-	-
10.493	#31	Output contact 5	-	-
10.494	#31	Output contact 6	-	-

Register word address in Modicon	VEGALOG		VEGAMET 513, 514, 515, 614	
	Module no.	No. of output	DISBUS address	Status / Switching status
10.495	#31	Output contact 7	-	-
10.496	#31	Output contact 8	-	-
10.497	#32	Output contact 9	-	-
10.498	#32	Output contact 10	-	-
10.499	#32	-	-	-
10.500	#32	-	-	-
10.501	#32	-	-	-
10.502	#32	-	-	-
10.503	#32	-	-	-
10.504	#32	Status: Card	-	-
10.505	#32	Output contact 1	-	-
10.506	#32	Output contact 2	-	-
10.507	#32	Output contact 3	-	-
10.508	#32	Output contact 4	-	-
10.509	#32	Output contact 5	-	-
10.510	#32	Output contact 6	-	-
10.511	#32	Output contact 7	-	-
10.512	#32	Output contact 8	-	-



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The statements concerning scope of delivery, application, practical use and operating conditions of the sensors and processing systems correspond to the latest information at the time of printing.

Technical data subject to alterations