Instruction Manual

VISAM Data agent

VGATE CLi / CSi

A product of the

VBASE - HMI/SCADA – family

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We have taken all possible measures to ensure the correctness and completeness of this documentation. Despite all care, errors cannot be avoided and we would appreciate any information or ideas at any time.

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1 Important Explanation

To ensure the user a fast installation and startup of the described devices it is essential to carefully read and note the following instructions and hints.

1.1 Legal Bases

1.1.1 Copyright

1.1.2 Personnel Qualification

The construction of the following instruction and the usage of the VBASE-product family require basic knowledge about the used windows operating system and the used remote systems. (e.g. SPS)!

The in this document described product use is directed exclusively to professionals or trained personnel, who are also familiar with the valid standards.
The VISAM GmbH offers at request inexpensive training for the use of the here described products.

1.1.3 Intended Use

The systems are delivered from factory with the specific use case and with a dedicated hardware and software configuration. Alterations are only allowed in the context of the in the documentation featured possibilities. All other changes to the hardware or software and the non-conforming use of the systems nullify the liability of VISAM GmbH.

1.1.4 License Agreement

The usage of all in this documentation described programs and program parts are subject to the VBASE license agreement.

1.2 Range of validity

This document provides a general description, in conjunction with certain hardware and/or software. Note the latest and detailed descriptions accompanying the products!

1.3 Used symbols

	**Note** Information that should be noted to ensure a faultless and effective operation.
	**Hint** Tips and hints for the efficient use of the system respectively system optimization.
	**ESD** Warning of damage to the systems / components by electrostatic discharge. Precautions should be taken when handling electrostatically sensitive components.

2 Introduction

2.1 Regarding this document

This manual is intended to clarify the use of the VISAM Data agent devices („VGATE"). In this document the device specific setting and possibilities are described.
The handling of the on this device installed VBASE HMI/SCADA software is described in a separate description.

2.2 The Article – and Model number

At this point a brief commentary on the article and model numbers of these VGATE series is given.
The model number is rather general and serves as a rough identification of the VGATE. The model number provides information about the operation system, the display size and the built-in version of the VGATE.
The article number however contains even more information. In the following figure, the part of the article number is further explained.

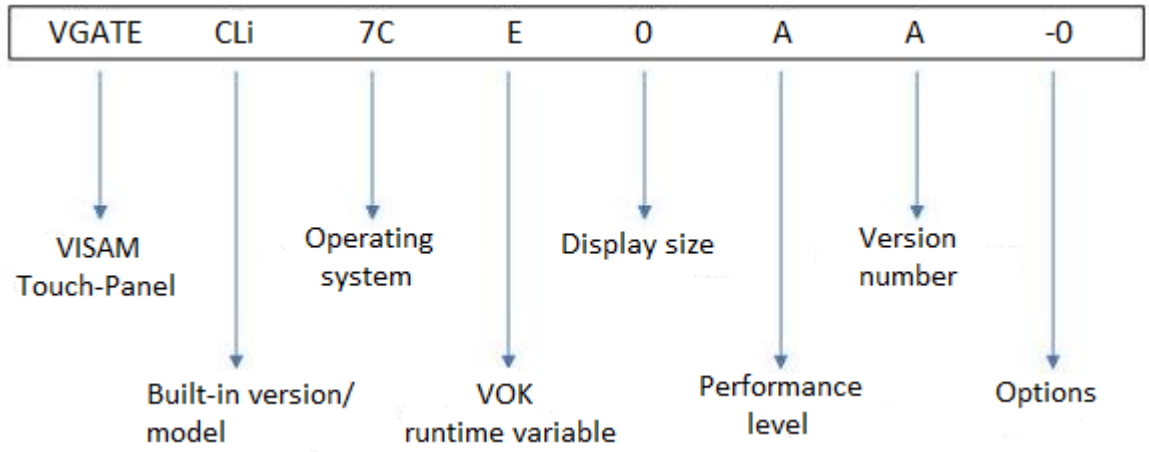


Figure 1 The Information of the article number

3 Specification

3.1 System data

VGATE CLi/CSi
Processor (CPU): AMD T40E 1.0GHz dual core, 512MB
RAM 2GB DDR3 833/1066MHz onBoard
Data memory: 4GB mSATA
LAN: Intel 10/100/1000 Base-T Ethernet controller, IEEE 802.3
Watchdog: 1~255 seconds, system reset

3.2 Interfaces

VGATE CLi/CSi
Serial interfaces: 10/100/1000 Base-T x 2,
RS-485 x 1,RS-232 x 1, 1 x HDMI 1.3, 1 x Display Port
Network (LAN): 2 x RJ-45 Ethernet
USB: 4 x USB 2.0
Extensions: 1 x full size mPCIe 2.0 Slot, 1 x iDoor (universal extension Slot)

3.3 Power Supply

Supply Voltage: 24VDC ± 15%
Electricity Demand (maximum): 14 W (typical), 24 W (max.)

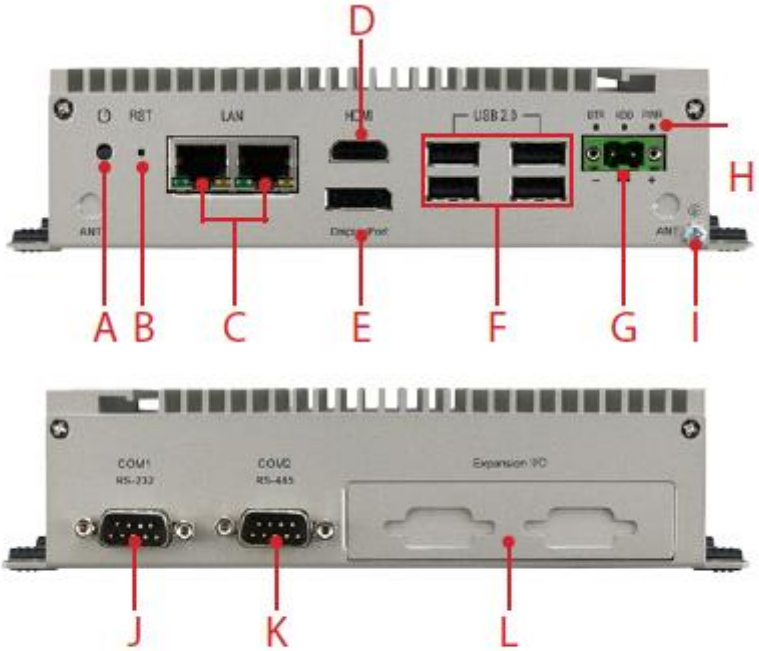
3.4 Intergrated Software

Operating system:	Microsoft Windows Embedded Compact 7
HMI/SCADA:	VBASE Compact-RT (VGATE CLi) VBASE Compact–Server (VGATE CSi)

The integrated software is embedded software that may be only operated on the delivered hardware system!

3.5 Interface Arrangement

The arrangements of the interfaces are depicted in the following figures:



A. Power On/Off	E. Display Port	I. Erdungsanschluss
B. Reset	F. 4x USB 2.0	J. COM1 RS-232
C. 2x Gigabit LAN	G. 24 VDC in	K. COM2 RS-485
D. HDMI	H. Indikator LED	L. iDoor Slot

Figure 2 Interface arrangement VGATE CLi/CLs

3.6 Connection Assignment

3.6.1 Power Supply

See power supply (chapter 3.5)

3.7 Power Switch

VGATE CLi/CSi do have a power switch (see figure 2).

3.8 Environmental Conditions

Environmental Temperature (while operating): 0 ~ 40°C
Storage Temperature: -40~85°C
Humidity: 40°C @ 10 ~ 95% relative (non condensing)
Vibration Resistance: 2 Grms @ 5 ~ 500 Hz (with SSD)
IEC 60068-2-64 (Random 1 Oct./min, 1hr/axis)
Shock: 50 G @ wall mount, half sine 1ms (with SSD)
IEC 60068-2-27

3.9 Safety

Safety front side: IP40

4 Software-Settings

All made changes are identical to every other Windows 7/8 version and can be executed in the same way as on any "normal" PC.

4.1 Setup / Changing of the network (IP)-address

To change the network-address of the device, follow these instructions:
Open the windows start-menu >> System control >> Network and Internet >> Network- and Sharing Center. There choose the corresponding network and edit the properties of the network.

In the now opened property-window enter the desired "IP-address", subnet mask, and if needed the "default gateway". In the second register "Name Server" the IP-address of the "DNS-Server" can be entered. Confirm the input by clicking "OK".
Exit the window "Network and Internet".

4.2 Remote control of the device via network

To remote control the device for a comfortable setup and maintenance, for example the application „VNC-Server" can be installed. A license free possibility would be "Efron VNC".

On the PC-system from which you want to connect to the panel, a compatible VNC-Viewer (e.g. UltraVNC, VNCviewer) must be installed and a network connection must be established.

The VNC-Server should be secured with a default-password. At the connection establishment the password will be queried.

Figure 3 VNC-Connection Establishment Remote Control

After the successful connection establishment the surface of the device can be used in a window (the VNC-Viewer) on the PC-system.

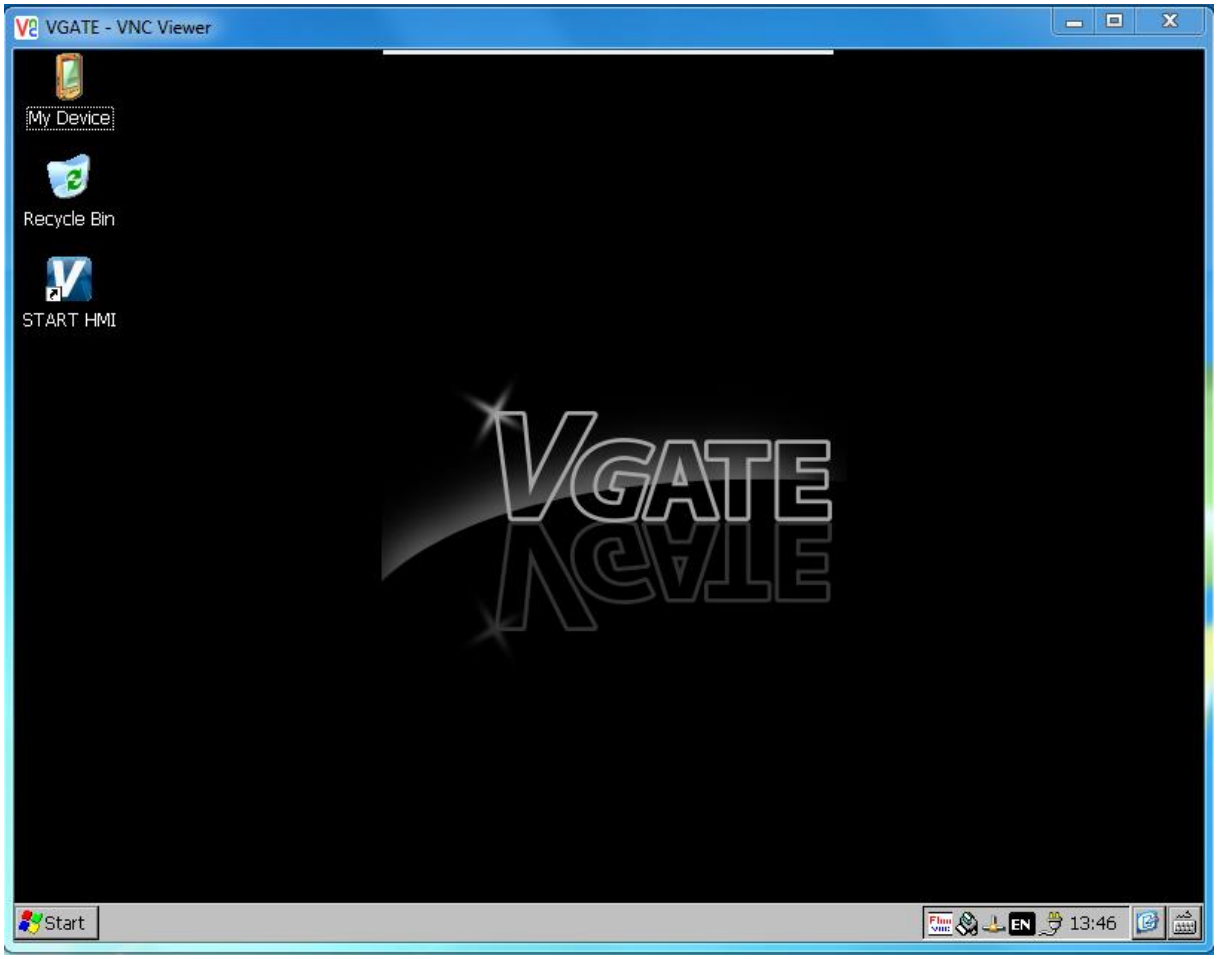


Figure 4 Remote Desktop

5 Appendix

5.1 Fuse

These VGATE are protected against electrical damage by a fuse.

The fuse cannot be changed readily, as trained personnel and soldering skills are required.

The fuse is triggered if a voltage > 32VDC is applied.

5.2 PIN- Assignment of the serial interface

5.2.1 Serial interface RS-232 (COM1)

Pin	RS232
1	DCD
2	RX
3	TX
4	DTR
5	GND
6	DSR
7	RTS
8	CTS
9	RI

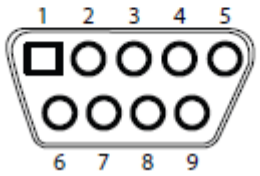


Figure 5 RS-232 (COM1)

5.2.2 Serial interface RS -485 (COM2)

Pin	RS485
1	D-
2	D+
3	
4	
5	GND
6	
7	
8	
9	

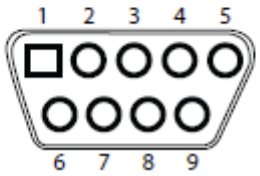


Figure 6 RS-485 (COM2)

5.2.3 USB Connection

Pin	Signal	Description
1, 10	USB VBUS	USB Power output ,USB2.0 5V/0.5A and USB3.0 5V/0.9A
2, 11	USB_P-	USB2.0 date -
3, 12	USB_P+	USB2.0 date +
4,13	GND	Ground for Power return
5	SSRX-	USB3.0 RX -
6	SSRX+	USB3.0 RX +
7	GND_DRAIN	Ground for signal return
8	SSTX-	USB3.0 TX -
9	SSTX+	USB3.0 TX +

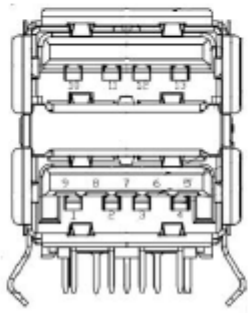


Figure 7 PIN-assignment USB-connection

5.3 Dimension and Cutout

5.3.1 Weight (VGATE CLi/CSi)

Weight: 1,0 kg

5.3.2 Cutout

VGATE CLi/CSi
Dimension: 190 x 107 x 47 mm (width x height x depth)
Maximum mounting panel thickness: < 6mm

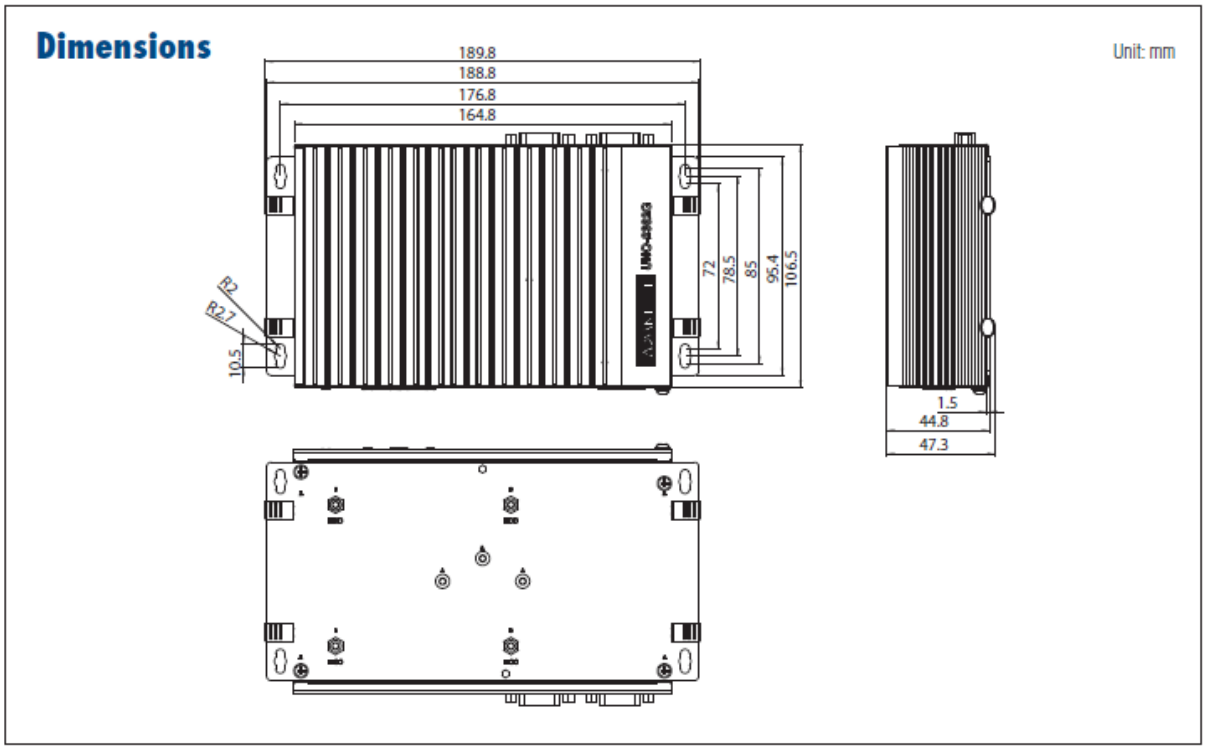


Figure 8 Cutout VGATE CLi/CSi

5.4 Illustration Directory