# SIEMENS

## Plant Operating Software

CD V5.0 or higher

Operating, service and alarm software

PC software for the remote operation, monitoring and commissioning of heating, ventilation and district heating plant and remote readout of consumption data. Windows version

#### Use

- Remote management with the OZW775 and OZW771 central communication units:
   Remote operation and monitoring of Synco<sup>™</sup> plants whose devices (primary controller, single room controllers, room units) are connected via Konnex bus
- Remote management with the OCI600 and OCI611 central communication units:
  - Remote operation and monitoring of heating plant whose devices (controllers, pulse adapters, temperature sensors/adapters, digital input modules and relay modules) are connected via LPB (Local Process Bus)
- Remote management with the M-bus central units OZW10 and OZW111:
  - Remote operation and monitoring of M-bus-compatible devices (controllers and meters) in community and district heat substations
  - Acquisition of consumption data of M-bus-compatible meters for consumption cost billing
  - Acquisition of consumption data from radio-based consumption meters of the Siemeca<sup>™</sup> AMR system, transmitted to the M-bus central unit OZW10 via the Mbus interface of the WTX16 or WTT16 network node
- Diagnosis and commissioning of LPB controllers with OCI69 and OCI700 service interfaces
- Diagnosis and commissioning of KNX controllers with OCI700 service interface
- Reception of alarms in plants with OZW30 and OCI55

## **Operating software** The operating software provides a number of applications, depending on the selected software package.

Application	Description				
Plant Diagram	Visualization and remote operation of data points with graphic				
user-defined	display of plant. Graph, data points and interconnections are de-				
	fined by the user				
Popcard	Visualization and remote operation of all transmitted data points of				
	the connected devices				
Standard	Predefined pages and data points of each device				
<ul> <li>User-defined</li> </ul>	Pages and data points as defined by the user				
Parameter	Reading and editing the setting parameters of a device in tabular				
Settings	form				
Plant Navigation	Plant view in the form of a tree structure. The view corresponds to				
	the addressing of the devices				
Connections	Type of connections				
Direct	With standard null modem cable or standard USB cable (connector type A to B)				
Modem	Via telephone modems				

#### Alarm software

The alarm software is an overriding program included in all software packages.

Application	Description
Alarm	Alarms from the central unit or the plant are received, stored, dis-
	played and output on a printer
System Report	Information from the central unit or the plant is received, stored,
	displayed and output on a printer
Connections	Type of connection
Direct	With standard null modem cable or standard USB cable (connec-
	tor type A to B)
Modem	Via telephone modems

#### Service software

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The service software has a fixed functionality and is included in all software packages.

Application	Description
Popcard	Visualization and remote operation of all transmitted data points
	of the connected devices
<ul> <li>Standard</li> </ul>	Predefined pages and data points of each device
<ul> <li>User-defined</li> </ul>	Pages and data points as defined by the user
Online Trend	Acquisition and presentation of the dynamic behavior of selected
	data points of the plant with connection to the plant
Parameter	Reading and editing the setting parameters of a device in tabular
Settings	form
Commissioning	Logging the setting parameters of individual devices, device
Report	groups or of the entire plant
Plant Navigation	Plant view in the form of a tree structure. The makeup of the tree
	structure corresponds to the addressing of the devices
Connection	Directly with standard null modem cable or standard USB cable
	(connector type A to B)

## **Functions with** central units

The functions are dependent on the type of central unit or the type of service interface.

	Type of central unit / service interface									
Function	0ZW775	0ZW771	0 <i>C</i> 1600	OC/611	0ZW10 3)	0ZW111	0EM30	0 <i>C</i> 155	0 <i>C</i> 169	0CI700
Plant Diagram	•	•	•	•	٠	٠			•	•
Popcard	•	•	•	•	•	•			•	•
Online Trend	•	•	•	•	•	•			•	•
Parameter Settings		•	•	•	•	•			•	•
Commissioning Report		•	•	•	•	•			•	•
Plant Navigation	•	•	•	•	•	•			•	•
Alarm	•	•	•	•	٠	٠	٠	٠		
System Report	•	•	•	•	٠	٠	٠	٠		
Connections										
Direct	• 2)	• 1)	• 1)	• 1)	• 1)	• 1)	• 1)	• 1)	• 1)	• 2)
Modem	•	•	•	•	•	•	•	•		

1) With standard null modem cable

2) With standard USB cable (connector type A to B)

3) Version V3.0 or higher

#### **Equipment combinations**

Number of plants

With all programs, the number of plants are unlimited.

Number of devices per plant

With the operating software, the number of devices per plant are limited. By contrast, with the alarm software and the service software, the number of devices are unlimited. To limit the number of devices, a credit is available with ACS700. Every device connected to the plant charges that credit with a device-specific value. The number of devices that can be operated are limited by the credit amount.

- The credit with ACS700 is 200
- The device-specific credits are as follows:

Type of product	Device-specific credit
OCI600, OCI611, OZW10, OZW111, OZW771, OZW775	10
OCI69, OCI700, WTX16, WTT16, KNX line coupler	0
	8
Synco™ RLU2, SEZ2	8
Synco™ RXB…*	2
Synco™ QAW740	1
SIGMAGYR <sup>®</sup> RVL, RVP, RVD	8
SONOHEAT <sup>®</sup> , SONOGYR <sup>®</sup>	3
Siemeca™ WF.21, WF.26	2
Siemeca™ WHE21, WHE36	1
Siemeca <sup>™</sup> AEW21.2 and AEW36.2 per input	1
PadpulsM1	1
Third-party device with own Device Description	8
Unknown device without own Device Description	8

\* only RXB... with KNX logo

PC component	Minimum requirement
Processor	Pentium-compatible
	300 MHz, recommended 600 MHz
RAM	128 MB, recommended 256 MB
Hard disk	1.9 GB free memory (Windows XP)
	2.0 GB with 1.0 GB free memory (Windows 2000)
	Recommended: additional 20 MB free memory per plant
Screen	VGA standard driver 800 x 600, 256 colors
	Recommended: SVGA standard driver 1028 × 768
Ports	USB 1.1 and higher or serial COM up to 19,200 Baud
	(directly or via modem)
	Parallel port for copy protection
Operating system	Windows XP, service pack 1
	Windows 2000, service pack 3
Diskette drive	3 <sup>1</sup> / <sub>2</sub> ", 1.44 MB, for diskette with log file
CD-ROM or DVD dr	ive

#### Modems

PC hardware

Modems are required if communication takes place via the telephone network. The drivers of the modems installed under Windows can be used.

### Type summary

ACS700 is supplied as a complete set. For the use of the software a license is not required.

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Type reference	Copy protection					
ACS700	not required					

### Ordering and delivery

Standard package	
Ordering	When ordering, please give type reference <b>ACS700</b> .
Delivery	The standard package is supplied as a set in a box, consisting of:
	CD-ROM with
	<ul> <li>operating software</li> </ul>
	<ul> <li>service software</li> </ul>
	<ul> <li>alarm software</li> </ul>
	<ul> <li>batchjob software (extra license requested)</li> </ul>
	- documentation

• Installation instructions

### Documentation

Software	Type reference	Document and reference number				
	ACS7	Installation Instructions CE1G5640xx				
		User Manual CE1U5640en (ACS Operation, ACS Service)				
		User Manual CE1U5641en (ACS Alarm)				
		User Manual CE1U5642en (ACS Batchjob)				
	ACS700	Data Sheet CE1N5641en				
	ACS712	Data Sheet CE1N5643en				
	ACS713	Data Sheet CE1N5644en				
	ACS715	Data Sheet CE1N5645en				
	ACS741	Data Sheet CE1N5647en				
	ACS785	Data Sheet CE1N5648en				

Systems	Type of system	Document and reference number			
	Synco™ 700 / Synco™ RXB	Range Description CE1S3110en			
	HVAC Controls with Konnex Interface				
	Konnex bus	Data Sheet CE1N3127en			
	Konnex bus, system description	Basic Documentation CE1P3127en			
	Local Process Bus (LPB), System Engi-	Basic Documentation CE1P2370E			
	neering				
	Local Process Bus (LPB), Basic Engineer- ing Data	Data Sheet CE1N2032E			
	Local Process Bus (LPB), Basic System Data	Data Sheet CE1N2030E			
	M-bus System	Basic Documentation CE1P5361en			
	M-bus System, Basic System Data	Data Sheet CE1N5361E			
	Siemeca™ AMR system	Data Sheet CE1N2870en			
Central units	Type of central unit	Document and reference number			
	Central communication unit OZW775	Data Sheet CE1N5663en			
		Installation Instructions CE1G5663en			
		Commissioning Instructions CE1C5663en			
	Central communication unit OZW771	Data Sheet CE1N3117en			
		Basic Documentation CE1P3117en			
		Installation Instructions CE1G3117xx			
	Central communication unit OCI600	Data Sheet CE1N2529E			
		Basic Documentation CE1P2529en			
		User Manual CE1U2529E			
	Central communication unit OCI611	Data Sheet CE1N2533en			
		Installation Instructions CE1G2533xx			
	M-bus central unit OZW10	Data Sheet CE1N5362E			

Technical	design

## Operating and service software

General

The operating software and the service software include applications with the following features:

User Manual CE1U5362E

Data Sheet CE1N5363en

Data Sheet CE1N5655de

Installation Instructions CE1G5363xx

- The following applications can be started several times and operated in parallel:
  - Plant Diagram
  - Popcard
  - Online Trend
  - Parameter Settings

M-bus central unit OZW111

Service interface OCI700

- Commissioning Report
- Several applications can be used simultaneously (e.g. Plant Diagram and Popcard)
- Active applications (e.g. Online Trend) can operate in the background
- User-defined adjustments can be made in the following applications and views:
  - Plant Diagram
  - Popcard

The software contains a device description of each supported device. The device descriptions define

- the data points with the associated features
- the links to the applications

#### Plant Diagram

This application permits the graphic presentation of plant (individual devices or groups of devices) with the following choices:

- Automatic updating of process values in the diagram
- Changing setpoints in the diagram
- Links to other diagrams can be established

A user-defined plant diagram is created as follows:

- Use external graphic software (e.g. Micrografx Picture Publisher<sup>™</sup>) for the graphic presentation. The graphs can be adopted in bitmap format
- For the inclusion of data points and links, the application has an Editor integrated All plant diagrams will be stored in a separate library. They can also be created without

having a connection to the plant (offline). The plant diagrams can be printed out.



Popcard

This application is used to visualize the transmitted data points of each device and their values.

Each type of device uses standard popcards. Makeup and contents of the operating pages are predefined

User-defined popcards can be created for each device and each node. Data points of all subordinate devices can be added to popcards that are assigned to a node. Standard and user-defined popcards can be copied to devices of the same type or to superposed nodes.

The user-defined popcards offer the following features:

- They can consist of several user-defined pages
- Each page can be subdivided into several user-defined sections
- Freely selectable data points and separators can be assigned to the popcards, the pages and the sections

Switching between the standard and the user-defined popcards is possible at any time. Each selected page is automatically updated. The updating process will be visualized.

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🖰 Plant Edit View Applications Iools Wi	ndow <u>H</u> elp	)				_ 8 ×
- 	⇒ €	🔲 🗙 🖻	2			
Heating						
Folder Items ×	N 🛆	Line no.	Address:	Data point	Value	Unit
⊡ - glig London City	• 1	51	Controller,12;0;1	Relay test	Inactive	
😑 📴 Device type Central unit,0	O 2	53	Controller,12;0;1	Plant type	Plant type 9	
🖻 🔁 Segment 0	03	54	Controller,12:0:1	Room temp setpoint current	10.0	*C
🖻 🔚 Device 5	04	56	Controller,12;0;1	Dhw temp actual value	>	*C
	O 5	57	Controller,12;0;1	Boiler temp actual value	56.9	*C
Device type Controller,12	0.6	58	Controller,12:0;1	Boiler sequence flow temp actual value	73.7	*C
E-E Segment U	07	62	Controller,12:0:1	Room unit type	>	
Device I	• 8	63	Controller,12;0;1	Room unit type	Digital	
Enduar	09		Controller,12;0;1	Remote telephone switch	Open	
Heating engineer 1	• 10	64	Controller,12:0:1	Heating curve parallel displacement	0.0	*C
Heating engineer 7	• 11	65	Controller,12;0;1	Room temp gain factor	4	
	• 12	67	Controller,12;0;1	Room temp switching differential	1.0	*C
Plant status	• 13	68	Controller,12:0:1	Flow temp min limitation	8	*C
Miscellaneous	• 14	69	Controller,12:0:1	Flow temp max limitation	80	*C
🖃 📕 Maintentance	• 15	70	Controller,12;0;1	Building construction	Light	
Heating	• 16	71	Controller,12;0;1	Heating curve adaptation	Operative	
🕀 📆 Device 2	• 17	72	Controller,12:0:1	Pump type	Boiler/heating circuit pump	
😟 📅 Device 7						
🖻 🛅 Segment 1						
🕀 🙀 Device 1						
🕀 🙀 Device 2						
E M Device 3						
Device 4						
E-E Segment 2						
Device I						
H-ME Device 2						
	•					
Press F1 for Opline Help						

The operating pages can be printed out and exported as an ASCII file.

Online Trend

This application allows any data points of a plant to be logged. The connection between plant and PC is established. All acquired data are stored directly on the PC. The graphic presentation of trend logging takes place online.

The description, the selected data points of all devices of the plant and the sample interval are defined in the trend definition.

In trend logging, the cyclically queried data are stored and graphically presented. Earlier trend logging can be graphically shown again at any time.

Trend logging can be printed out and exported as an ASCII file.



### Parameter Settings

This application is used to download, upload or compare the settings of the connected devices.

The settings can be

- stored as a parameter set
- · compared with a stored parameter set
- compared with the standard parameter set
- overwritten with a stored parameter set
- overwritten with the standard parameter set

The parameter sets can be edited either online or offline. The individual data points of a parameter set can be selected. The transmission result of uploading, downloading or comparing is displayed online.

The parameter set can be printed out and exported as an ASCII file.

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Image: Segment 1       Image: Segment 2       Image: Segment 2       Image: Segment 2         Image: Segment 2       Image: Segment 2       Image: Segment 2       Image: Segment 2	_ <u>-</u>
Endet terms         X         Line no.         Address:         Data point         Value         Unit           Image: Segment 0         1         Controler,12.0.2         Heat circuit operating mode on the controller         Automatic         Automatic         Image: Segment 0         Image: Segment 1         Image: Segment 1<	
Image: Index index         N         Line no.         Address:         Data point         Value         Unit           Image: Index City         Imag	
Image: Segment 0         Automatic         Automatic           Image: Segment 0         2         2         Controller, 12.0.2         Heat circut operating mode on the controller         Automatic           Image: Segment 0         Image: Segment 0         Image: Segment 0         Image: Segment 0         Monday	Transmiss
Image: Device type Central unit.0       Image: Central unit.0       Image	
Image: Segment 0         Segment 0           Image: Segment 0         Image	
Image: Controller, 12	
Device type Controller,12         T         Controller,12.0.2         Time switch program Wednesday         06:00-22:00         hrm           Image: Device 1	
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**Commissioning Report** 

This application is used to log the setting values of individual devices, groups of selected devices or of entire plants.

The data points of the selected devices are stored with data point designation, value, unit and status.

The commissioning report can be printed out and exported as an ASCII file.

🛃 ACS Operating - [Commissioning Report]							
	ndow <u>H</u> elp						_ 8 ×
🖆   🖧   🐺 🐺   X 🖻 🖻 🔶	⇒ 🗈 🔳 >	< 🖻   🔋 👘					
Enduser							
Folder Items ×	No. 🛆	Line no.	Address:	Data point	Value	Unit	
E gig London City	01		Controller,12;1;3	Heat circuit oper	Standby		
🖻 🛄 Installation	O 2		Controller,12;1;3	Manual operation	Off		
E- Commissioning report: 2002-01-08	03		Controller,12;1;3	Room temp setp	0.0	°C	
E 🛃 Device 3	04		Controller,12;1;3	Analog heating	41.5	°C	
<u>     Bunduser</u>	O 5		Controller,12;1;3	Analog heating	61.5	°C	
Switching program	06		Controller,12;1;3	Outside temp	16.9	*C	
Heating angineer	07		Controller,12;1;3	Flow temp actua	44.6	°C	
Service	08		Controller,12;1;3	Boiler temp actu	>	°C	
Miscellaneous	09		Controller,12;1;3	Room temp actu	>	°C	
	O 10	1	Controller,12;1;3	Room temp nomi	20.0	*C	
	O 11	2	Controller,12;1;3	Room temp redu		°C	
	O 12	3	Controller,12;1;3	Room temp setp		D.	
	O 13	14-17	Controller,12;1;3	Clock time			
	O 14		Controller,12;1;3	Error signal			
•							
Press E1 for Opline Help				Eilter ON		· · · · · · · · · · · · · · · · · · ·	NUM

#### Alarm software

General

The alarm software consists of the following applications for the reception and further handling of alarms and of the plant's operating status:

- Alarm
- System Report

Alarm

Every alarm received from the plant is entered in an alarm list.

The alarm reception sequence can be configured:

- Acoustic signal
- A popup window opens. The alarm is entered in the alarm list only when the window is closed
- Printout on a printer
- Any combination of the 3 choices

The user can select the columns of the alarm list. The column designations and the arrangement of the individual columns can be configured on a user-specific basis.

The entire alarm list can be exported as an ASCII file. Also, to facilitate further handling in other programs, the alarms received are automatically exported to an ASCII file.

📕 ACS Alarm - [A	darm - alarmist.ala]					
🏏 <u>F</u> ile <u>E</u> dit ⊻ie	w E <u>x</u> tras Alarm So	rt <u>W</u> indow <u>H</u>	elp			_ 리 ×
	« » • ?					
Туре	Plant name	Alarm	Device error	Transmit time	Occurrence time	
001600	OC1600	INPUT 3	1: Alarm	23.05.2001 15:00	23.05.2001 15:00	
0011600	OC1600	INPUT 2	1: Alarm	23.05.2001 15:00	23.05.2001 15:00	
001600	OC1600	INPUT 1	1: Alarm	23.05.2001 14:59	23.05.2001 14:59	
🗒 OZW10	OZW10	OZW10	73: Alarm input 3	22.05.2001 15:23:51	22.05.2001 15:23	
OZW10	OZW10	OZW10	72: Alarm input 2	22.05.2001 15:23:37	22.05.2001 15:23	
OZW10	OZW10	OZW10	71: Alarm input 1	22.05.2001 15:23:34	22.05.2001 15:23	
OZW111	OZW111	OZW111	71: Alarm input 1	22.05.2001 15:02:09	22.05.2001 15:02	
	OCI611	Device 1	123: Alarm flow temp dhw	19.05.2001 17:16	19.05.2001 17:16	
001611	OCI611	Device 1	54: Flow temp dhw sensor error	19.05.2001 17:15	19.05.2001 17:15	
OCI611	OCI611	Device 1	123: Alarm flow temp dhw	19.05.2001 17:15	19.05.2001 17:15	
OCI611	OCI611	Device 1	61: Room unit 1 error	19.05.2001 17:15	19.05.2001 17:15	
OCI611	OCI611	Input 1	171: Alarm contact 1 closed	19.05.2001 16:45	19.05.2001 16:45	
OCI611	OCI611	Input 2	172: Alarm contact 2 closed	19.05.2001 16:45	19.05.2001 16:45	
OCI611	OCI611	Input 1	O: No error	19.05.2001 16:45	19.05.2001 16:45	
OCI611	OCI611	OCI611	81: LPB short-circuit or no bus power supply	19.05.2001 16:45	24.04.2001 09:45	
Proce E1 for hol	n			1	1-15/15	COLU

System Report

The system report is used to monitor plant operation.

It contains general information about the plant, such as type of central unit, phone number of the plant and plant name. Also, a system report of the OCI600 central unit can transmit alarms, meter readings or the number of operating hours.

The system report can be output on a printer.

Die Edit View Egitas Alam Sot Window Help
Image: Second
Type         Transmit time         Phone number         Plant name           OCI600         08.01.2002 11.05         041.724.5121         OCI600           OCI600         08.01.2002 11.35         041.724.5121         OCI600
OC660         08.01.2002         041.724.5121         OC660           OC660         08.01.2002         041.724.5121         OC660
OCI600 08.01.2002 11:35 041 724 5121 OCI600
OCI600 08.01.2002 13:44 041 724 5121 OCI600
rress F1 for help 1 1-3/3 COM1

## **General functions**

Plant Navigation

For plant navigation, the plant is presented in the form of a tree structure. The following applications support this mode of presentation:

- Plant Diagram
- Popcard
- Online Trend
- Parameter Settings
- Commissioning Report

The plant view in the form of a tree structure can either be shown or hidden.

ACS Operating - [Popcard]						
Plant Edit View Applications Iools Window Help						
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Enduser						
Folder Items	🗙 No. 🛆	Line no.	Address:	Data point	Value	Unit
⊡ 📲 London City	• 1	1	Regler,12;1;2	Room temp nominal setpoint	20.0	°C
🕀 🔜 [Gerät: 5]	• 2	2	Regler,12;1;2	Room temp reduced setpoint	14.0	*C
🖻 🛄 Hide Park Lane	• 3	3	Regler,12;1;2	Room temp setpoint holiday mode/frost protection	10.0	°C
🖻 🦲 Building 27	• 4	5-10.1	Regler,12;1;2	Time switch program 1 Monday	06:00 - 22:00	htm
🖭 📆 [Gerät: 1]	• 5	5-10.2	Regler,12;1;2	Time switch program 1 Tuesday	06:00 - 22:00	h:m
E- Building 29	• 6	5-10.3	Regler,12;1;2	Time switch program 1 Wednesday	06:00 - 22:00	h:m
	• 7	5-10.4	Regler,12;1;2	Time switch program 1 Thursday	06:00 - 22:00	h:m
Electric I i	• 8	5-10.5	Regler,12;1;2	Time switch program 1 Friday	06:00 - 22:00	h:m
E IGoria 21	• 9	5-10.6	Regler,12;1;2	Time switch program 1 Saturday	06:00 - 22:00	htm
Standard	• 10	5-10.7	Regler,12;1;2	Time switch program 1 Sunday	06:00 - 22:00	htm
Junto	• 11	14	Regler,12;1;2	Dhw temp nominal setpoint	55	*C
Enduser	O 12		Regler,12;1;2	Dhw temp actual value warmer	0.0	*C
Holiday period 1-8	• 13	17-22.1	Regler,12;1;2	Time switch program 2 Monday	05:00 - 22:00	htm
MFB	• 14	17-22.2	Regler,12;1;2	Time switch program 2 Tuesday	05:00 - 22:00	htm
TSP 3	• 15	17-22.3	Regler,12;1;2	Time switch program 2 Wednesday	05:00 - 22:00	h:m
10s	• 16	17-22.4	Regler,12;1;2	Time switch program 2 Thursday	05:00 - 22:00	htm
	• 17	17-22.5	Regler,12:1:2	Time switch program 2 Friday	05:00 - 22:00	htm
1-4	• 18	17-22.6	Regler,12:1:2	Time switch program 2 Saturday	05:00 - 22:00	him
Plant status	• 19	17-22.7	Regler,12;1;2	Time switch program 2 Sunday	05:00 - 22:00	htm
🕀 🔜 [Gerät: 3]	O 20		Regler,12;1;2	Error signal	No error	
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#### Connections

Communication with the central units can take place either directly or via modem.

Direct connection for plant supervision

Direct connection

for service

In the case of a direct connection, a standard null modem or standard USB cable is required between central unit and PC.





In the case of a connection via the telephone network, a Hayes-compatible modem is required on each side.



For more detailed information about RS-232 cables, standard null modems and modems, refer to the various pieces of Basic Documentation.

## **Commissioning notes**

The software must be installed according to the Installation Instructions supplied with the CD.

#### **General note**

The programs offer the standard Windows Help functions, so a description of the commands and menus is available at any time.