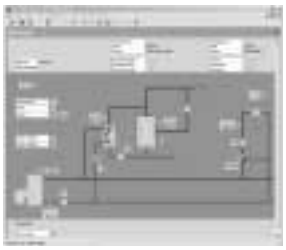
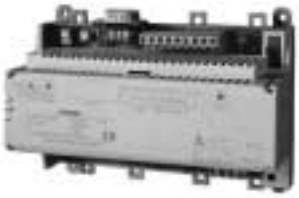




SIEMENS

HVAC Products

Standard systems

Standard systeme for:
- heating, ventilation or air conditioning – Synco™ KNX
- Heating plants – SIGMAGYR®, AEROGYR™
- District heating and metering – SIGMAGYR®, SONOHEAT, Siemeca™
- Control and energy cost – SYNERGYR®

Standard PC software ACS7.. consist of:
- Service software
- Operating software
- Alarm software
- Batchjob software

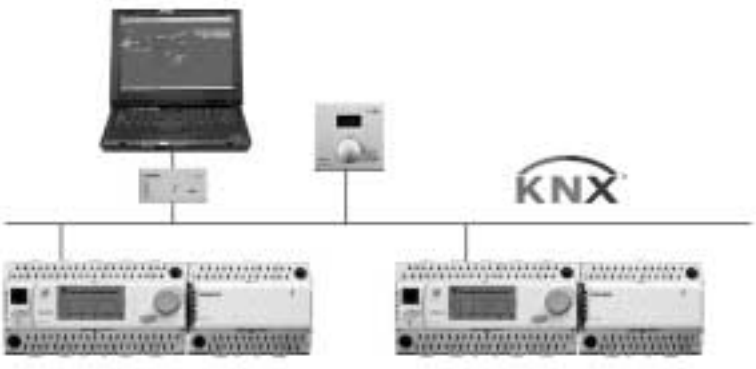
Summary of fields of applications

Standard systems for:	Heating, ventilation or air conditioning	Heating plants	District heating and meter readout	Control and energy cost allocation
Main components	Synco™	SIGMAGYR® AEROGYR™	SIGMAGYR® SONOHEAT Siemeca™	SYNERGYR®
Heating controllers	Synco™ RMH760	SIGMAGYR®-Series – RVL400-Heating controllers – RVP300-Heating controllers – RVP500-Energy manager – RVD200-District heating contr.	SIGMAGYR®-Series RVD200-District heating controllers	SIGMAGYR®-Series [1]
Ventilation and air conditioning controllers	Synco™ RMU710 Synco™ RMU720 Synco™ RMU730	– AEROGYR RWI65		
Room controllers	Synco™ RXB			WRV-Control and heating cost allocation vaves
Energy meters		AEW2.1 Pulse adapter	SONOHEAT Heat meters Siemeca™ Heat meters Siemeca™ AMR-Radio system AEW21 Pulse adapter	WRV-Control and heating cost allocation valves AEW2.1 Pulse adapter
Communication bus	KNX (Konnex)	LPB (Local process bus)	M-Bus (Metering bus)	Batibus
Max. bus extansion [2]	1'000 m/700 m	2'500 m/1'200 m	up to 10'000 m (without repeater)	2'500 m/600 m
Speed	9'600 baude	4'800 baude	300–9'600 baude	4'800 baude
Max no. comm. devices [3]	24/64	16/40	– /700	– / 102 [4]
Process data exchange	Yes	Yes	No	Yes
Central data readout	Yes	Yes	Yes	Yes
System:		OCI600	OZW10	
Communication central unit	OZW771	OCI611..	OZW111	OZW30
Software	ACS7..	ACS7..	ACS7..	ACS30
Service tool	OCI700.1	OCI700.1	OCI700.1 (for SIGMAGYR®)	AZW30/ACS30

[1] For the load compensation and the outside temperature transmission
[2] Summary cable length/distance to the furthest device
[3] With decentralized/centralized bus power supply
[4] 96 (user units) and 6 meters (general)

Standard system for heating, ventilation or air conditioning Synco™

Low engineering system to easily build complex applications with flexible and modular combinations of standard controllers Synco™ 700. Standard Systems for HVAC plants are capable to be remote operated and can generate alarms to service centers. Full control without engineering.



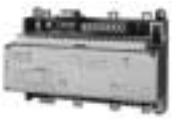
Bus standards for communications in buildings were originally designed for specific disciplines. The common bus standard Konnex (KNX) was developed by the associations responsible for the 3 bus technologies EIB, BatiBUS and EHS. This standardization process supports the trend towards the «smart home» in which various plants from the fields of HVAC, lighting and security technology are integrated in a common communications network.

The Konnex bus (KNX) uses a network structure derived from the European Installation Bus (EIB). The technical key features are the following:

- 2-core bus cable, twisted pairs, no shielding required
- Distributed bus power supply (the Synco™ 700 controllers supply the bus power)
- Compatible with EIB

The new standard is based on the following principles:

- Flexibility in the definition of functions for the devices installed in the network
- Interworking in the same communications network between products from widely differing manufacturers
- All products with Konnex certification comply with the Konnex standards. Konnex is backward-compatible with EIB (Konnex/EIB devices exclusively in S-mode).



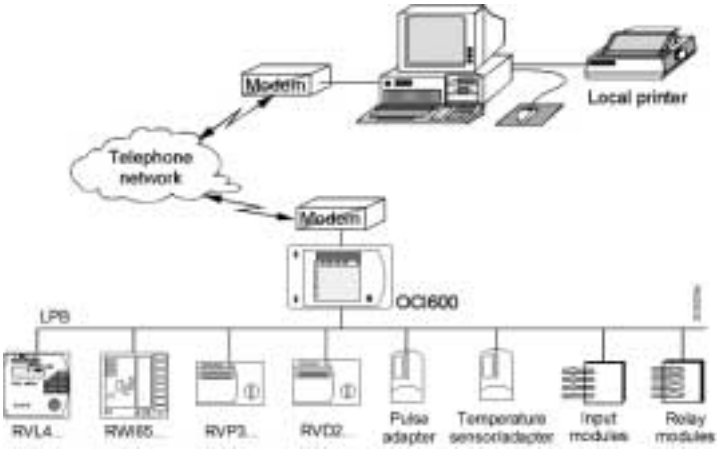
OZW771

Communication central units	**OZW771** Mini telephon gateway	
Device versions	OZW771.04	OZW771.10
No. of comm. devices [1]	4	10
Digital imputs (potential free)	2	
As alarm input	Yes	
As counter (operating hours)	No	
Digital output	None	
Operation	LED	
Bus power supply	No	
Alarming		
Max. telephon no.'s	2	
ACS Alarm via PC	Yes	
Fax	With SMS via GSM	
Pager	With SMS via GSM	
SMS	Yes	
Printer	No	
e-mail	With SMS via GSM	
General device data		
Operating voltage	AC 230 V ±10 %	
Frequency	50/60 Hz	
Power consumption	5 VA	
Degree of protection	IP30 [2]	

[1] Synco™ controller series 700, RXB, QAW740
[2] IP20 without terminal covers

Standard System for heating plants SIGMAGYR®, AEROGYR™

Low engineering system to easily build complex applications with flexible combinations of standard controllers SIGMAGYR® Series RVL400, SIGMAGYR® Series RVP300, SIGMAGYR® Series RVD200 and AEROGYR™ RWI65. Standard Systems for heating plants are capable to be remote operated and can generate alarms to service centres: Full control without engineering.




OCI600

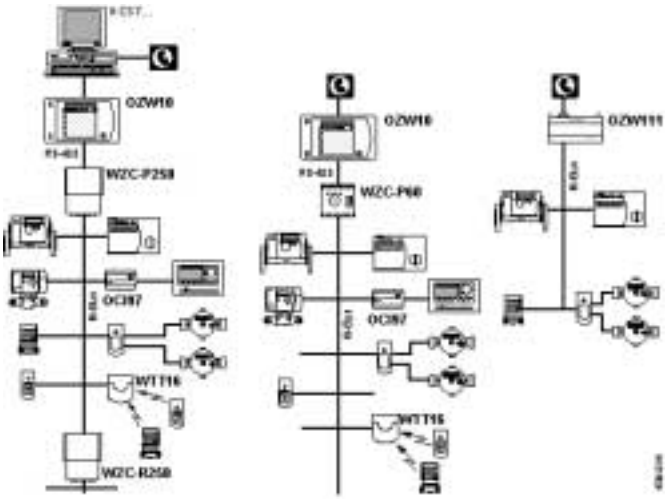

OCI611

Communication central units	**OCI600** Comm. central unit	**OCI611** Mini telephon gateway		
Device versions	OCI600	OCI611.01	OCI611.05	OCI611.16
No. of comm. contollers	16	1	5	16
No. of external I/0 modules				
– Digital input [1]	4			
– Digital output [2]	4			
No. of external pulse inputs [3]	6			
No. of external temp. inputs [4]	2			
Digital inputs (potential free)	4	2		
As alarm input	Yes	Yes		
As counter (operating hours)	Yes	No		
Digital outputs	2 (max. AC 24 V)	None		
Operation	LCD, Operating cards	LED		
Bus power supply	Yes	No		
Alarming				
Max. telephon no.'s	4	2		
ACS-Alarm via PC	Yes	Yes		
Fax	Yes	With SMS via GSM		
Pager	Yes	With SMS via GSM		
SMS	Yes	Yes		
Printer	Yes	No		
e-mail	No	With SMS via GSM		
Offline trend funktion	Yes [6]	No		
General device data				
Operation voltage	AC 24 V	AC 230 V ±10 %		
Frequency	50/60 Hz	50/60 Hz		
Power consumption	8 VA	5 VA		
Degree of protection	IP40	IP30 [5]		

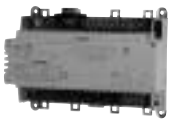
[1] DOE4IN
[2] DOE4RE
[3] AEW2.1 with 2 pulse inputs
[4] QAB30.600 with 2 temperature inputs
[5] IP20 without terminal covers
[6] Together with the memory card

Standard System for district heating and meter SIGMAGYR®, SONOHEAT, Siemeca™

Heat metering and billing system with M-bus, acquisition of heat and water consumption and remote supervision of controls. M-bus central unit for central readout in extensive heat distribution networks and apartment blocks and terraced houses.



OZW10



OZW111

Communication central units	**OZW10** Communication central unit	**OZW111** Mini telephon gateway
No. of comm. devices	Up to 700	5
Digital alarm input(potential free)	4	2
Digital alarm relais	1	None
Operation	LCD, Operating card	LED
Bus power supply	No [1]	Yes
M-Bus support		
Adressing	Primary und secondary	Primary und secondary
Baud rate	300, 2400, 9600	300, 2400
Max. Cable extension [2]	10'000 m / 10'000 m [3]	500 m / 100 m
Alarming		
Max. telephone no.'s	4	2
ACS Alarm via PC	Yes	Yes
Consumption data		
Data storage	Yes	No
Read out via RS-232	Yes	Yes
Read out via memory card	Yes	None
General device data		
Operating voltage	AC 24 V	AC 230 V ±10 %
Frequency	50/60 Hz	50/60 Hz
Power consumption	8 VA	5 VA
Degree of protection	IP40	IP30 [4]

[1] Bus power supply WZC-P60 or WZC-P250 necessary. Using the bus power supply WZC-P250 a network extension with repeater WZC-R250 is possible.

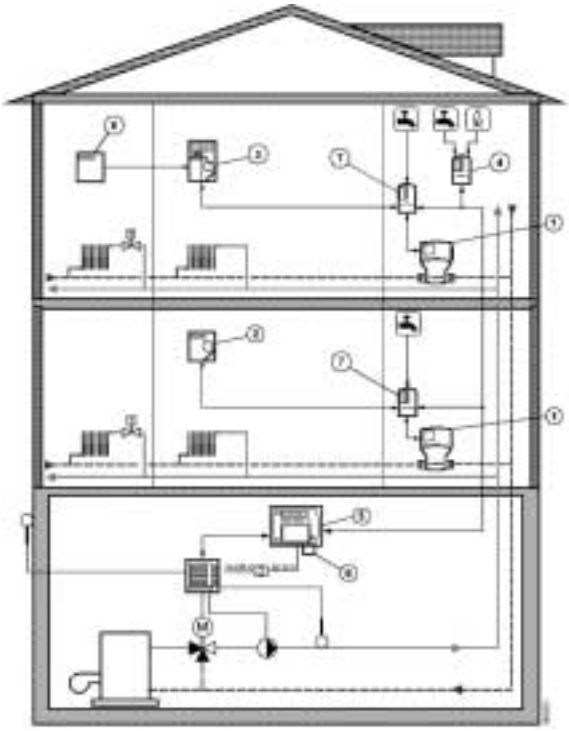
[2] Sum. cable lenth/distance to remotest device

[3] Point to Point connection

[4] IP20 without terminal covers

Standard System for control and energy cost SYNERGYR®

Heat metering and billing system with integrated room temperature control, especially for new apartment blocks that use horizontal piping. Central acquisition of water and heat at the heating inlet to the apartment.



Following versions are available:
Comfort: Heat metering system with individual room control.
Eco: Heat metering system with integrated reference room control.
Standard: Proper heat metering system without room temperature control.

1 Control and heating cost allocation valve WRV..
2 Room unit QAW10
3 Room unit QAW20
4 Pulse adapter AEW2.1
5 Central unit OZW30
6 Memory card ALC30.128
7 Conduit box ALW30
8 Remote temperature detector QAW44
(for use with the QAW20)

OZW30

Communication central units	**OZW30** Communication central units
No. of comm. devices	Up to 96 (user units) and 6 meters (general)
Digital inputs	2 as counter or alarm inputs 2 as fixed alarm inputs
Digital alarm relais	1
Operation	LCD, Operating cards
Bus power supply	Yes
Alarming	
Max. telephon no.'s	2
ACS Alarm via PC	Yes
Consumption data	
Data storage	Yes
Read out via RS-232	Yes
Read out via memory card	Yes
Data exchange	With LPB controllers
General devices data	
Operating voltage	AC 24 V
Frequency	50/60 Hz
Power consumption	10 VA
Degree of protection	IP40

ACS7..-, Operating, service, alarm and batchjob software

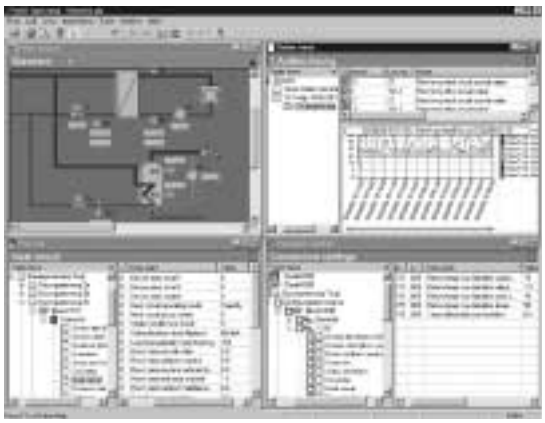
PC software for the remote operation, monitoring and commissioning of heating, ventilation and district heating plant and remote readout of consumption data. (Windows version)

- Remote management with the OZW771 central communication units:
  Remote operation and monitoring of HVAC plant whose devices (controllers, RXC room controller and room units) are connected via KNX TP1 (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 radiobased consumption meters of the Siemeca™ AMR system, transmitted to the M-bus central unit OZW10 via the Mbus interface of the WTT16 network node.
- Diagnosis and commissioning of LPB controllers with OCI700 service interfaces
- Diagnosis and commissioning of KNX controllers with OCI700 service interface

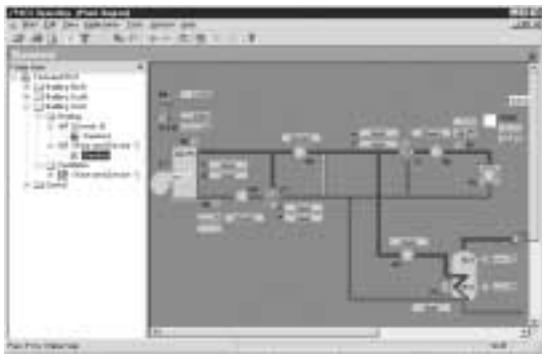
Operating software

Application
- Plant overview
- Remote operation and parameterization
- Troubleshooting
- Meter readings

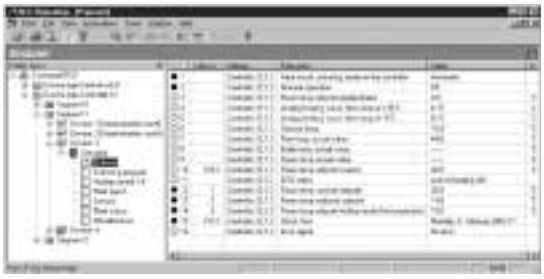
Properties
- Device-oriented operation
- Extended data access
- Standard functions
- Low engineering (plug & play)
- User can customize the user interface



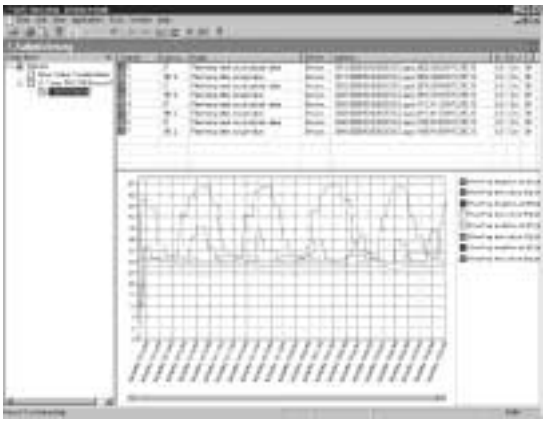
Applications
Plant diagram:
- Fast checking of plant parts
- Plant overview
- Standard graphics for controllers with application-specific plant diagrams: One graphic with predefined data point display for each device type and for each application.
- Definition of user-defined graphics:
  – Based on standard graphics
  – Based on own graphics in bitmap format
  – Display of additional data points and information. Links to other graphics



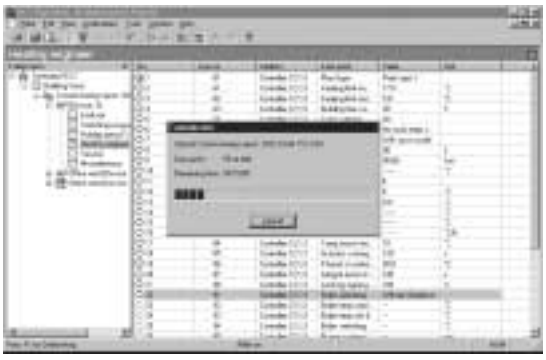
Pop card:
- Checking of device status
- Checking and changing of settings
- One standard pop card per device type
- Application-oriented structure of the pop card pages
- Several user-defined pop cards per device type
- Change between standard and user-defined pop card



Online-/Offline-Trend:
- Plant optimization
- Verification of time response
- Simultaneous logging of data points for several devices
- Online visualization of the logged data in the online trend
- Automatic saving of the logged data
- Save, load, and export of the logged data



Commissioning report:
- Saving of the commissioning state of one or several devices
- The data to be saved is predefined for each device type
- Application-oriented visualization of saved data
- Save and export of commissioning reports



File transfer:
- Read and save the billing data saved in the OZW10 for devices on the M-bus system
- Read the alarm history of the OCI600
- Read data of the communication stations' memory card
- Formatting of memory cards

Parameterization:
- Creating standard parameter sets
- Compare parameter settings
- Remote adjustment of parameters
- Track parameter changes
- Several parameter sets per device type
- Save, load, and export parameter sets

Alarmsoftware

Application
- Receive alarm annunciations/messages and system reports
- Archive alarm messages
- Print messages received
- Supplement alarm messages by additional information

Properties
- Option to customize the display
- Export alarm messages

Batch job software

Application
- Time control of parameters (setpoints, etc.) in heating plants: e. g. for load management
- Time controlled registration of selected process and consumption values in heating plants, community and district heating plants: e. g. for further data analysis in separate, user-specific programs
- Cyclical transfer of billing data with consumption data on M-bus capable meters to the PC

Properties
- Actions on data points of any devices in the system
- Sequential and prioritized task execution

ACS7.. Standard packages

ACS7.. is available in different standard variants that can be ordered via ASN directly, and that are optimized to certain user groups and plant sizes:

		ACS700	ACS712	ACS713	ACS715	ACS741	ACS785	ACS920
CD-ROM		1	1	1	1	1	1	1
Dongle		1	1	1	1	1	1	1
Programs								
Service Software (Pop Card, Parameter Setting, Trend- on line, Commissioning Report, No Modem)		1	1	1	1	1	1	1
Alarm Software		1	1	1	1	1	1	1
	Receive & show alarms	1	1	1	1	1	1	1
	Receive & show reports	1	1	1	1	1	1	1
Operating Software		1	1	1	1	1	1	1
	Graphics UserDef	1	1	1	1	1	1	1
	Pop card	1	1	1	1	1	1	1
	Parameter setting	1	1	1	1	1	1	1
	File Transfer			1	1	1	1	
	Trend - on line				1		1	
	Trend - off line		1	1	1		1	
	Commissioning report			1	1		1	
	Plant view			1	1		1	
	Graphics Standard			1	1		1	
Batchjob Software					1		1	
OPC Server Software								1
Number of plants for Monitoring SW, Batchjob SW and OPC Server		unlimited	unlimited	unlimited	unlimited	unlimited	unlimited	unlimited
Credits for Monitoring SW, Batchjob SW and OPC Server per plant								
Total number of credits		200	200	200	200	1.300	3.900	200

Programs:

Program is running without Dongle
-> Number of plants & number of devices per plant is unlimited. Functionality is predifined and independend from Dongle
Program runs when marked with x:
-> Functionality, number of plants and number of devices per plant of program are depending is on Dongle and key

Functionality of programs (yellow)

Function is running without Dongle
Function is only running with Dongle and if the key allows it (Functions with x run)