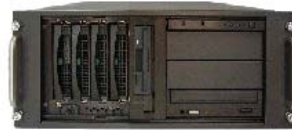




PLD9.TOWER



PLD9.RACK

VISONIK®

DCS Data and communication server

PLD9.TOWER
PLD9.RACK

Data and communication servers (DCS) are used as management stations in building automation and control (BAC). With DDC technology, the DCSs, as superposed system components, allow for customer-specific solutions of all building automation and control tasks.

Use

The DCS' application range comprises a large number of building automation and control tasks such as:

- Process station communication at the subsystem level.
- Processing of acquired process data in real time.
- Continuous storage of selected process values (temperatures, setpoints, etc.).
- Monitoring of technical installations.
- Output of higher commands (e.g. peak load control, emergency power and network restoration).
- Logging of plant faults.
- Alarming of internal and external service organizations.
- Sending clear text messages based on technical plant events.
- Triggering reactions based on various causes:
Time, date, process value changes and operating hours (maintenance).
- Simultaneous execution of various BAC tasks (multitasking).
- Presentation of process values, consumption variables, efficiency degrees and further operational and technical system information in transparent displays.
- Operation of system-wide BAC functions via graphical user interfaces.

- Connection of linked and third-party systems.
- Operation of building automation and control systems via networks.

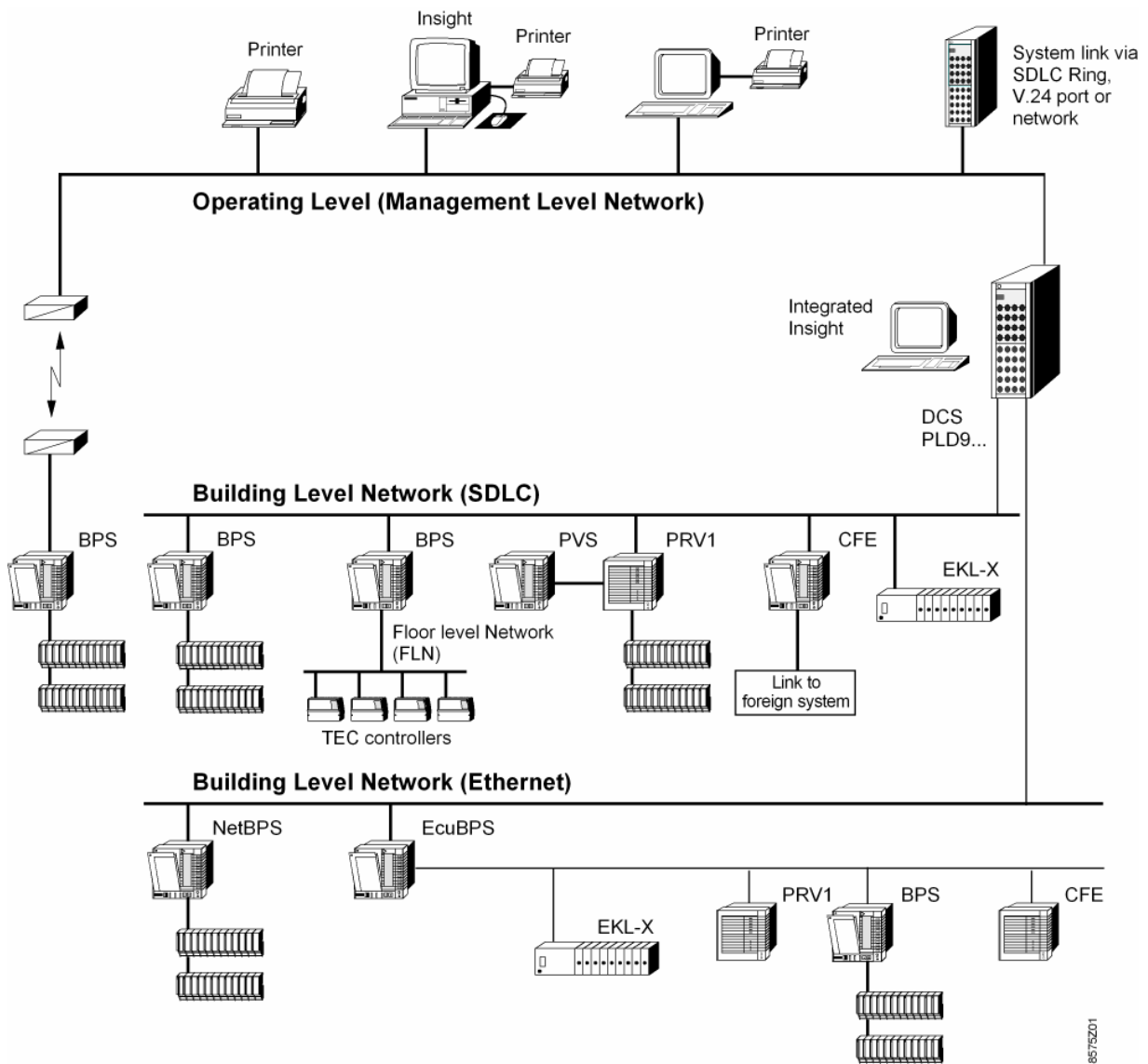
Type summary

The PLD9-series of the DCS data and communication server consists of two housing types with scalable software licenses and hardware options.

Tower housing:	19" rack housing:	
PLD9.TOWER	PLD9.RACK	DCS for 6 – 200 subsystems
Option 1:	Number of subsystems	6, 10, 15, 25, 50, 75, 100, 150, 200
Option 4:	VISONIK Version	V24
Option 6:	R-server	redundant server operation

System configuration

Example for a VISONIK system configuration:



8575Z01

Basic hardware

The data and communication server is delivered with the following hardware components:

We reserve the right to make changes to the basic hardware configuration.

Required number of computer types PLD9....	Tower	Rack	Order number
Basic PC			
Caution: The computers are delivered without keyboard and monitor!			
– Housing (tower or 19" rack).	1	1	
– Mouse	1	1	
– CPU hard drive supporting	1	1	
<ul style="list-style-type: none"> - 1 mouse (PS/2) - 1 keyboard (PS/2) - 1 LAN, 1x RJ45 - 2 COM port V.24 (9-pin) - 1 Centronics parallel interface (25-pin) - 3 USB interfaces (2 x rear, 1 x front panel) - 1 SCSI 1 channel Ultra320 SCSI for HDDs with RAID1 - 2 I/O slots PCI-X 64-bit / 66 MHz, long; (3,3V) - 3 I/O slots PCI 32-bit / 33 MHz, 2 x short, 1 x long (5V) - 2 I/O slot express (1x1, 1x8) - 1 IDE Controller, 2 x ATA100 (for CD / DVD drives) - 1 VGA graphics 			
– Pentium 4 processor / memory (SDRAM) 651 (3,40 GHz) / 2 GB memory	1	1	
– PC-M multifunction card with:	1	1	ALD9.M/KIT
<ul style="list-style-type: none"> - Watchdog - Radio clock - Auto reset WD - Front control panel including cable set 			
Network card on main disk.	1	1	
Equipment for connection of BLN and terminal server.			
Storage media:			
– 3.5" / 1.44 MB diskette drive.	1	1	
– DVD-DUAL/DL 5.25" drive, 40/24/40x 16x/16 8x4 4/2.4 ATAPI.	1	1	
– Hot plug hard drive 73 GB (Ultra2wide).	1	1	ALD9.F

Basic software

The data and communication server is delivered with the following preinstalled software:

Computer type PLD9.	Tower	Rack
– Windows XP Professional	x	x
– VISONIK software (functionality according to version and computer type).	x	x
– VISONIK DCS license for 6 process stations.	x	x
– VT100 emulator to connect terminals in a window to \$T1.	x	x
– Norton Ghost 2003	x	x

Options

The following software and hardware components can be installed in addition to the basic installation.

We reserve the right to make changes to the basic hardware configuration.

Possible number of computer types PLD9....	Tower	Rack	Order number
– PCI graphics card , 128 MB, for higher performance	1	1	PLD9.G128/E
– PCI analog modem	1	1	ALD9.ANALOG
– PCI ISDN modem	1	1	ALD9.ISDN
– PCI audio card	1	1	ALD9.AUDIO
– Uninterrupted power supply (UPS) APC SU-1000	1	1	ALD.USV
– Redundant power supply	1	1	ALD9.RPS
Equipment for connection of BLNs.			
– SDLC/FSK kit to operate 6 SDLC rings incl.: - PC-S card - Connection cable to SDLC plug panel - SDLC plug panel 6x25 D-sub.	1	1	ALD9.S6/KIT
– Connection units to the SDLC rings (number) per ring; not part of delivery.	6	6	LVR2.4321
– Connection cable to connection units (length 6m or 12 m, number per Ring; not part of the delivery).	6	6	LVR1.4401
	6	6	LVR1.4402-E
Equipment for additional interfaces:			
– Terminal server (2 x V.24 interfaces), incl. - 1 power supply (230 VAC / 12 VDC) - 2 adapter cables CBL-RJ45M9-150.	6	6	ALD.TS2
– Terminal server (4 x V.24 interfaces), incl. - 1 power supply (230 VAC / 12 VDC)	4	4	ALD.TS4
– Terminal server (8 x V.24 interfaces), incl. - 1 mains cable (230 VAC) - 4 adapter cables 1.5m, type CBL-RJ45M25-150 - 4 adapter cables 1.5m, type CBL-RJ45M9-150 - 1 RJ45 loopback test plug - 2 mounting brackets for 19" - 4 rubber bases	2	2	ALD.TS8
– Terminal server (16 x V.24 interfaces), incl. - 1 mains cable (230 VAC) - 8 adapter cables 1.5m, type CBL-RJ45M25-150 - 8 adapter cables 1.5m, type CBL-RJ45M9-150. - 1 RJ45 loopback test plug - 2 mounting brackets for 19" - 4 rubber bases	1	1	ALD.TS16
Storage media:			
– MO drive (exchangeable, magneto-optical drive) 2.3 GB, Fujitsu for upgrades and data backup, incl. - 3 disks at 2.3 GB.	1	1	ALD9.MO
– DAT drive DDS-5 incl. - mounting kit - 3 tapes - SCSI controller.	1	1	ALD9.DAT
– Hot plug hard drive 73 GB (Ultra2wide) for expansion to RAID 1.	2	2	ALD9.F
– Hot plug hard drive 73 GB (Ultra2wide) for expansion to RAID 5.	3	3	ALD9.F
– SCSI RAID controller for RAID 5.	1	1	ALD9.RAID5
– Memory SDRAM 1 GB (extended memory).	2	2	ALD9.MEM

Computer performance characteristics

Below is a list of performance features not readily apparent from the list of components and accessories above. Furthermore, a few important VISONIK system variables are listed. Options are printed in parentheses.

	Computer types PLD9...	Tower	Rack
Basic feature:			
– Upgradeability to higher PLD types and options		Yes	Yes
– Watchdog, reset, radio clock, control panel.		Yes	Yes
– RAID1 or 5 (redundant array of independent disks).		Yes	Yes
Interfaces:			
– Parallel interfaces		1	1
– USB plugs		3	3
Serial interfaces	Standard	2	2
- Terminal server	2 x V.24 interfaces (RS232)	4	4
- Terminal server	4 x V.24 interfaces (RS232)	6	6
- Terminal server	8 x V.24 interfaces (RS232)	10	10
- Terminal server	16 x V.24 interfaces (RS232)	18	18
	Maximum		
Operation:			
Total number of terminals, printers and modems	Standard	2	2
	Maximum	(15)	(15)
– Maximum number of dial modems		6	6
– Operating system languages		1 (3)	1 (3)
– Number of access levels		5	5
– Maximum number of concurrent users		15	15
System variables:			
– Maximum number of connections for SDLC rings		6	6
– Maximum number of process stations (EKL-X, PRV1, PRV2, BPS1, CFE) on BLN (SDLC, Ethernet) or via modem		200	200
– Addressing (alphanumeric user address), number of characters		26	26
Linked system:			
– Number of VISONIK computers within linked system		20	20
– Alarm printer for messages from various systems possible in each system		Yes	Yes
Security			
– VISONIK computer as R-server; redundant operation of VISONIK server possible as an option via network.		Yes	Yes

* The maximum number of 15 messaging channels or 18 terminal channels respectively per DCS cannot be exceeded. The indicated standard characters represent a recommendation.

We reserve the right to make changes to the computer configuration.

Documentation

See the following data sheets for information on VISONIK subsystems:

BPS process station	CM2N8302
Building process station BPS/NetBPS	CM2N8306
CFE controller, PLC1.00	CM2N8941
EcuBPS	CM2N8307

Technical data

If not mentioned specifically, the following information applies to all computer types.

Power supply	Mains supply PLD9.TOWER and PLD9.RACK	100 V – 240 V
	Mains frequency	50/60 Hz
	Max. rated current: PLD9.TOWER and PLD9.RACK	100 V – 240 V / 6 A – 3 A
	Active power	274 W
Dimensions	H x W x D in mm, no plug PLD9.TOWER PLD9.RACK	444 x 205 x 605 5 height units (U)
	PLD9.RACK (installation depth).	560 mm (without plug)
Weight	PLD9.TOWER and PLD9.RACK	ca. 28 kg (depending on configuration).
Ambient conditions	Operating temperature	10 ... 35°C (DIN EN 60721)
BLN data transmission	System bus protocol	SDLC/FSK
V.24 data transmission	Transmission rates for terminals, INSIGHT, printers and modems	As per the specifications
Network data transmission	Transmission protocol Networks	TCP/IP, NetBIOS via TCP/IP Ethernet
	Rate of transmission Chip	10/100/1000 Mbps Broadcom 5721
CE conformity	EMC directive Low voltage guideline	89/336/EEC 73/23/EEC
Electromagnetic compatibility	Emissions Immunity	EN 55 022 class A; EN 55 024 EN 61000-3-2 and EN 61000-3-3
Product standard	Safety of information technology equipment	IEC 60950 / EN 60950 UL 60950 3rd. Ed. CAN/CSA-C22,2 No. 60950 3rd. Ed.