SIEMENS

8583

PLD12.TOWER

PLD12.RACK

VISONIK®

DCS Data and communication server

PLD12.TOWER
PLD12.RACK

Replacement server

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.

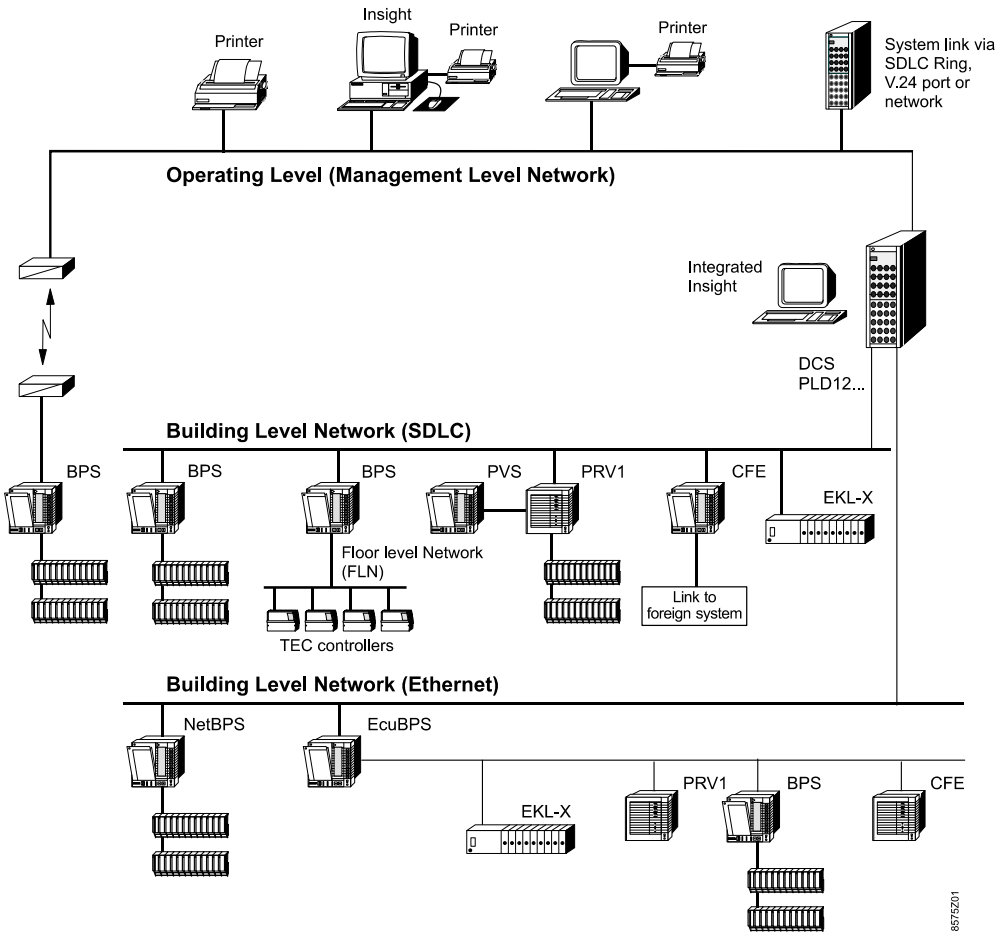
Type summary

The PLD12-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:	
PLD12.TOWER	**PLD12.RACK**	DCS for 10 – 200 subsystems
Option 1:	Number of subsystems	10, 15, 25, 50, 75, 100, 150, 200
Option 4:	VISONIK Version	V26
Option 6:	R-server	redundant server operation

System configuration

Example for a VISONIK system configuration:



Basic hardware

The replacement server is delivered with the following hardware components:

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

Required number of server types PLD12...	**Tower**	**Rack**	Order number
Basic PC			
Caution: The computers are delivered without keyboard and monitor!			
– **Housing tower**	1		PLD12.TOWER
– **Housing rack**		1	PLD12.RACK
– **Mouse**	1		
– **CPU hard drive supporting** - 1 mouse - 1 keyboard - 2 LAN, 2 x RJ45 - 1 COM serial RS-232-C (9-pin) - 9 USB interfaces (2 x front, 4 x back, 3 x internal) - 1 RAID5/6 controller for SAS base units - 1 I/O slot PCI-Express x4 - 3 I/O slots PCI-Express x8 - 1 I/O slot PCI-Express x16 - 1 I/O slot PCI 32-bit / 33MHz, 1 x long, 5V - 1 SATA controller (2 ports used for accessible drives) - 1 VGA graphics (15-pin)	1	1	
– **Intel XENON processor E5-1410 / memory** 2.80 GHz Quad Core / 2 x 2 GB DDR3	1	1	
– **PC-M multifunction card** with: - Watchdog - Radio clock - Auto reset WD - Front control panel including cable set	1	1	
Network card on main disk	1	1	
Storage media:			
– **DVD-RW** 5.25''	1	1	
– **Hot plug hard drive** 300 GB 2.5''	1	1	ALD12.F

Basic software

The replacement server is delivered with the following preinstalled software:

Server type PLD12.	**Tower**	**Rack**
– **Microsoft Windows Server 2008 32 Bit**	•	•
– **VISONIK software** (functionality according to version and computer type)	•	•
– **VISONIK DCS license**	○	○
– **VT100 emulator to connect terminals in a window to $T1**	•	•

○ VISONIK DCS license is taken over from the broken PLDxx as per the disposal declaration

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

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 for server types PLD12... Tower	Rack	Order number
– **PCIe- graphics card**, 512 MB for higher performance	1	1	PLD12.G512/E
– **PCI analog modem with USB interface**	1	1	ALD.ANALOG
– **PCI ISDN modem with USB unterface**	1	1	ALD.ISDN
– **PCI audio card**	1	1	ALD11.AUDIO
– **Uninterrupted power supply (UPS)** 1000 VA	1	1	ALD.USV
– **Redundant power supply**	1	1	ALD12.RPS
Equipment for connection of BLNs.			
– **SDLC/FSK kit to operate** 6 SDLC rings incl.: - PC-S express card - Connection cable to SDLC plug panel - SDLC plug panel 6x25 D-sub	1	1	ALD11.S6/KIT
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
Storage media:			
– **RDX drive** 160/320 GB for upgrades and data backup, incl. - 1 RDX cartridge 160/320 GB	1	1	ALD.RDX
DAT drive DDS Gen 5 incl. - mounting kit - 3 tapes - SCSI controller	1	1	ALD.DAT
– **Hot plug hard drive** 300 GB SAS for expansion to RAID1	2	2	ALD12.F
– **Hot plug hard drive** 300 GB SAS for expansion to RAID5	3	3	ALD12.F

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.

Server types PLD12...		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:			
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
Operation:			
Total number of terminals, printers and modems	Standard Maximum*	2 (15)	2 (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
EcuBPS	CM2N8307

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

Power supply	Mains supply PLD12.TOWER and PLD12.RACK	100 - 240 V
	Mains frequency	50 - 60 Hz
	Max. rated current: PLD12.TOWER and PLD.10.RACK	2.4 A
	Active power	278 W
Dimensions	W x D x H PLD12.TOWER PLD12.RACK	 177 x 651 x 456 mm 483 x 611 x 177 mm
	PLD12.RACK (installation depth)	4 height units (U)
Weight	PLD12.TOWER and PLD12.RACK	ca. 29 Kg (depending on configuration).
Ambient conditions	Operating temperature	10 - 35°C
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 Rate of transmission	TCP/IP, NetBIOS via TCP/IP Ethernet 10/100/1000 Mbps
Europe conformity CE label according to EU directivies	EMC directive Low voltage guideline	2004/108/EC 2006/95/EC EN 300386, EN 50371, EN55022, EN 55024, EN 60950-1, EN 61000-3-2, EN 61000-3-3
Global		CB, RoHS, WEE