



PLD11.TOWER



PLD11.RACK

VISONIK®

DCS Data and communication server

PLD11.TOWER
PLD11.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.

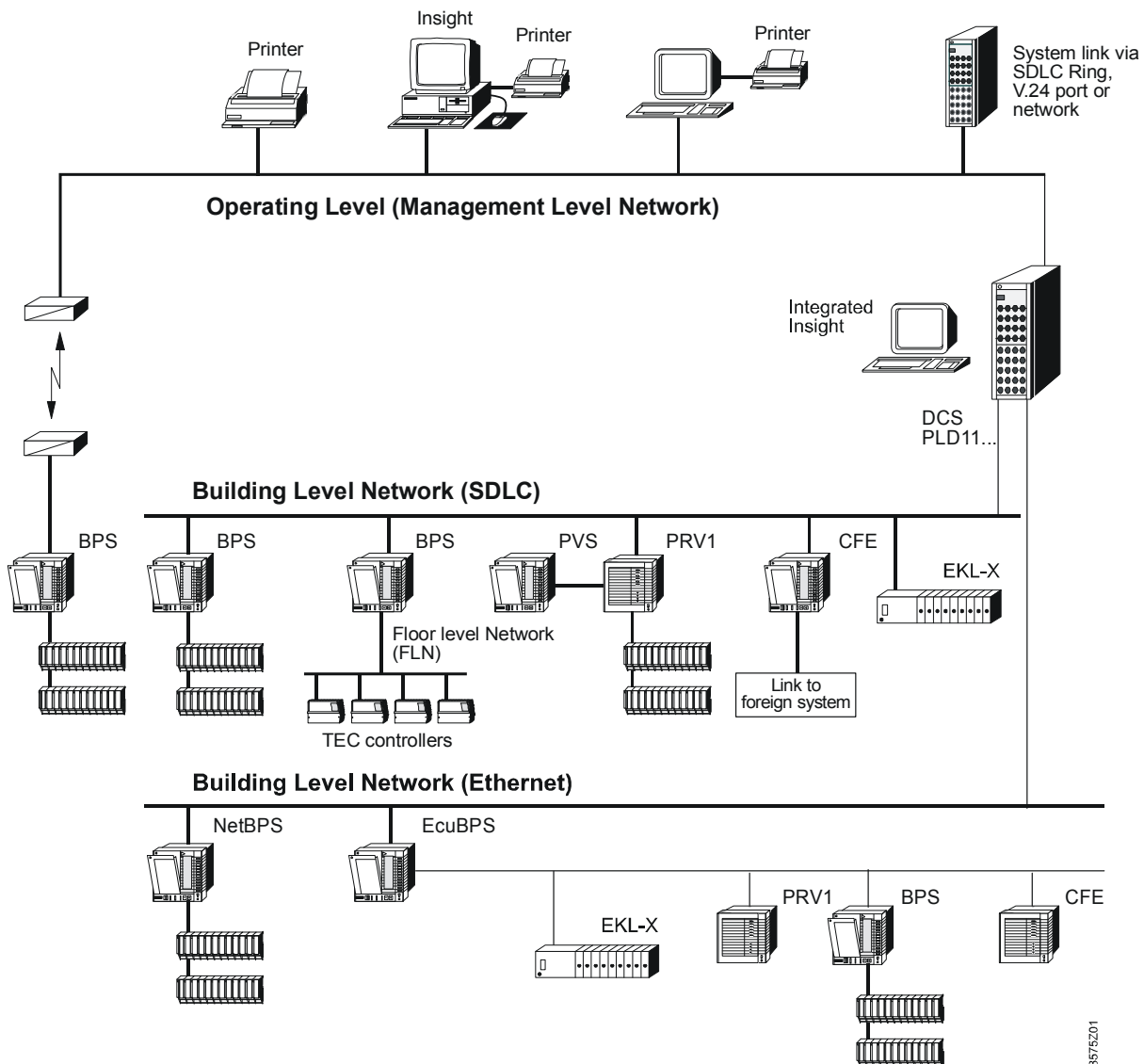
Type summary

The PLD11-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:	
PLD11.TOWER	PLD11.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:



8575201

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 server types PLD11...	Tower	Rack	Order number
Basic PC			
Caution: The computers are delivered without keyboard and monitor!			
– Housing tower	1		PLD11.TOWER
– Housing rack		1	PLD11.RACK
– Mouse	1		
– CPU hard drive supporting	1	1	
– 1 mouse			
– 1 keyboard			
– 1 LAN, 1x RJ45			
– 2 COM serial RS-232-C (9-pin)			
– 10 USB interfaces (3 x front, 4 x back, 3 x internal)			
– 1 RAID5/6 controller for SAS base units			
– 2 I/O slots PCI-Express x1			
– 1 I/O slot PCI-Express x4			
– 2 I/O slots PCI-Express x8			
– 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)			
– Intel XENON processor X3450 / memory			
2.66 GHz Quad Core / 4 GB DDR3	1	1	
– PC-M multifunction card with:	1	1	
– Watchdog			
– Radio clock			
– Auto reset WD			
– Front control panel including cable set			
Network card on main disk	1	1	
Storage media:			
– DVD-RW 5.25"	1	1	
– Hot plug hard drive SAS 146 GB 2.5"	1	1	ALD11.F

Basic software

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

Server type PLD11.	Tower	Rack
– Microsoft Windows Server 2008 32 Bit	•	•
– VISONIK software (functionality according to version and computer type)	•	•
– VISONIK DCS license for 10 process stations	•	•
– VT100 emulator to connect terminals in a window to \$T1	•	•

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 PLD11...	Tower	Rack	Order number
– PCIe- graphics card , 256 MB for higher performance		1	1	PLD11.G256/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) APC SU-1000		1	1	ALD.USV
– Redundant power supply		1	1	ALD11.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
– 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:				
– RDX drive 80-160 GB for upgrades and data backup, incl. - 1 RDX cartridge 160/320 GB		1	1	ALD.RDX
– DAT drive DDS-5 incl. - mounting kit - 3 tapes		1	1	ALD.DAT
– Hot plug hard drive 146 GB SAS for expansion to RAID1		2	2	ALD11.F
– Hot plug hard drive 146 GB SAS for expansion to RAID5		3	3	ALD11.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 PLD11...		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

Technical data

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

Power supply	Mains supply PLD11.TOWER and PLD11.RACK	100 - 240 V
	Mains frequency	50 - 60 Hz
	Max. rated current: PLD11.TOWER and PLD.10.RACK	100 V – 240 V / 6 A – 3 A
	Active power	258 W
Dimensions	W x D x H PLD11.TOWER PLD11.RACK	205 x 584 x 444 mm 482 x 570 x 220 mm
	PLD11.RACK (installation depth)	5 height units (U)
Weight	PLD11.TOWER and PLD11.RACK	ca. 28 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	TCP/IP, NetBIOS via TCP/IP Ethernet
	Rate of transmission	10/100/1000 Mbps
Europe conformity CE label according to EU directivities	EMC directive Low voltage guideline	2004/108/EC 2006/95/EC EN 300386, EN 50371, EN55 022, EN 55024, EN 60950-1, EN 61000-3-2, EN 61000-3-3
Global		CB, RoHS, WEE