

# CE 3000



MASCHINEN,- ANLAGEN-  
STEUERUNGSTECHNIK UND  
SYSTEMSOFTWARE GmbH

## SER/D • LCD-PC for Pivoting Frame mountable in a switching cabinet

Standard IPC housing 19"/4U, only 400mm deep, containing a mainboard or a passive motherboard to build an industrial PC. Built-in LCD 8,4"; optional with resistive touch screen; 2x5¼ and 1x3½ drive slots; ATX power supply 350 or 450W.

### ■ APPLICATIONS

Standard-IPCs are usually 500mm deep; they cannot be installed in pivoting frames of industrial switching cabinets. The **SER/D** was designed to eliminate this disadvantage, thus being able to carry all kinds of IPC applications for measuring, controlling and observation purposes as well as a master- or slave computer in an industrial network. The **SER/D** will be fastened at the front of a 19" switching cabinet and it carries all necessary IPC boards and components.



### ■ DESCRIPTION

The **SER/D** contains an ATX mainboard with slots to insert AGP standard-PCI boards. The system may be equipped with an AMD as well as an INTEL CPU mainboard. There are 4- to 5 PCI slots available for application-specific peripheral boards depending on the type of mainboard. On request a passive motherboard will be installed to carry a slot-CPU.

The left side of the front panel bears a 8,4" SVGA-LCD (800x600 pixel) with LVDS interface; displaying 256K colors at 350 cd/m<sup>2</sup> brightness, a contrast ratio of 500:1 and a lifespan of 50 000 hrs. of the backlight. The display is covered by a glass panel; optional a resistive touch screen will be inserted.

The right side is covered by a lockable flap. Behind this flap there are 2x5,25" und 1x3,5" drive slots. Also there is the power switch, the reset pushbutton, the USB-jack for connection of a programmer's keyboard and 3 status LEDs. All additional interface connectors are placed at the rear side.

The ATX power supplies (350W or 450W) are equipped with separate fans and power switches, the power input is 230VAC and/or 90-240VAC. On request MASS will install the O.S. and the client-specific software image.

### ■ OPTIONS

Changes of front / rear panel incl. paintwork color and the company LOGO; completion, wiring and funktional test of all boards and components. Lockable drawer 19"/1U/D=400mm with a removable keyboard.

### ■ HIGHLIGHTS

■ ATX mainboard with AMD or INTEL CPU. Alternative: insertion of a passive motherboard.

■ Front panel with 8,4" LCD, LVDS interface, 256K colors, 350cd/m<sup>2</sup> option: resistive touch.

■ Rear connectors: COM 1/2, 2xUSB, VGA, Ethernet 10/100 MBit/s, sound, keyboard/mouse.

■ Front elements: 1xUSB, status-LEDs: power+HDD POWER ON switch and RESET pushbutton.

■ Power supply to select from: 230VAC, 24VDC or 95 - 265VAC; operation temperature 5...55°C.

■ Operation systems DOS, WINDOWS NT, WIN 98/2000, WIN XP, XP embedded or Linux.

■ 2 slots for 5 ¼ "drives, 1 slot for 3 ½ "drive, filter pad changable from the front, lockable flap.

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HIGHLIGHTS

- INTEGRATED LCD 8,4"; OPTION: TOUCHSCREEN
- FRONT: USB PLUG; STATUS LEADS: POWER, RESET  
PUSHBUTTONS: POWER, RESET
- SHORT HOUSING F. PIVOTING FRAME: 400MM DEPTH
- SCALABLE CPU PERFORMANCE
- CE-COMPLIANT
- CAPABILITY FOR INDUSTRIAL APPLICATIONS
- AVAILABILITY MIN. 3 YEARS



IPC – SER/D

Stand: 03/2008

Hardware	Beschreibung
Housing	19"/4U ATX housing, color RAL7035; integrated 8,4" display 800x600dpi for switching case with pivoting frame. Behind lockable flap: power + reset pushbuttons, 3 status LCDs, USB plug, 2x 3½" HDD, 2x 5¼" CD/DVD, 1x 3½" FD, 1x AGP, 6x PCI
Interfaces (external) (Rear panel)	Serial: 1x COM(RS232), 4x USB Parallel: 1x LPT Graphics: CRT, DVI, SVHS Network: LAN10/100Mbps Fast Ethernet Input: PS/2 (Keyboard, Mouse) Audio: Microphone, Line-IN, Line-OUT (3,5mm plug) Additional: extra Ethernet board 3 COM 3C-2000-T
Mainboard	Formfactor: Micro-ATX, Socket 478 Chipset: Intel® 845PE FSB 400MHz BIOS: AMI® Interfaces: 1x AGP, 4x PCI, 2x IDE, 2x SATA, 1x FD Audio: Chipset: Realtek AC'97 Battery: 3Volt (CR2032)
CPU	Type: Intel Pentium® 4-2,8GHz L2 Cache 512K „Northwood“
Main memory	DDR 1x 512MB PC2100 / 184-pin DIMM
Mass memory	HDD 1x 80GB/IDE 3½" 2MBCache 7.200 U/min.
Changable memory	Floppy 1x 3½" Standard 1,44MB CD 1x 5¼" Laufwerk / Brenner
Graphic board	Chipset: ATI Mobility™ M10 (industrial), AGP3.0, 64MB SDRAM 400MHz Interfaces: VGA, DVI, LVDS, TTL, TV (Dual Display Mode)
Display	TFT: 8,4"; 350 cd/m²; 800x600 pixel; 256 colors
Power supply	Formfactor: ATX 2.03 (Pentium® 4 / Athlon™ XP Ready) Input: 115-230 VAC / 50-60Hz (automatische / manuelle Umschaltung) Output: +3,3VDC/+5VDC/+12VDC/-12VDC/-5VDC Power: 350 Watt max.

Mechanics	Dimensions: W x H x D
Housing	483 x 177 x 448 mm incl. handles; Installation depth without handles: 400mm
Weight	18,5 kg

Options	Description
Drawer keyboard	Cherry G84-4400 Tastatur (black) with trackball in a lockable 19"/1U drawer housing Resistive touchscreen 8,4"
Software	Windows® 2000 SP4, different OS on request

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