DATA SHEET

Manufacturer:	**Jakob Hatteland Display AS**
Product:	**Industrial Rack Computer**
Type:	**HT 403P4 STD**

HATTELAND® DISPLAY

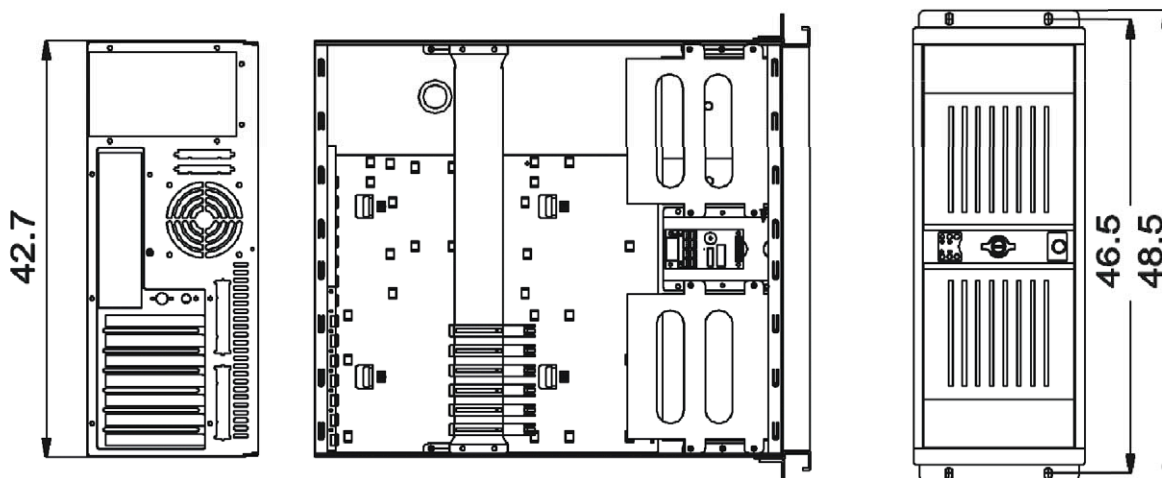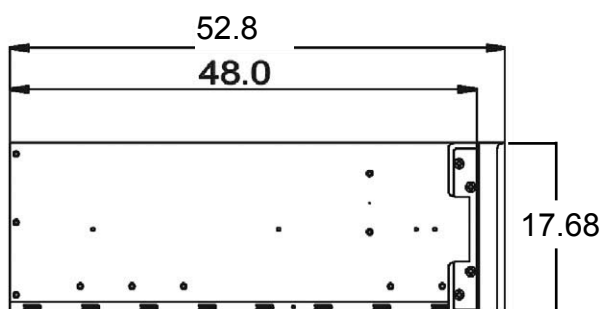Last Revised: **01 Apr 2005**
Revision#: **17**

Industrial Rack Computer

Overview:

Get first-class performance across a broad range of applications with **HT 403P4 STD** Industrial Rack Computer. Ideal for use in industrial and maritime environments where performance is important. Leading edge technology makes these computers the smart choice for all heavy applications. Features a preheating circuit that will be automatically activated if temperature reaches 0°C or lower.

Brief Specifications:
- Intel Pentium 4 - 2.8GHz (Socket 478)
- Intel Extreme Graphics (Up to 2048 x 1536, up to 120 Hz)
- 256MB RAM
- 40GB 3,5" HDD
- CD-R/W (52x/32x/52x)
- 1,44MB 3,5" FDD
- 10/100Base-T Fast Ethernet with Wake-On-LAN
- 2 x RS-232 Serial Ports
- 1 Parallel port
- Standard PS/2 mini DIN connector and pin header for keyboard and mouse.
- Dimensions 427 (W) x 176 (H) 480 (D) mm
- Power supply 110/230V - 300W
- See page 2 for complete specifications and options

Note: All specifications are subject to change without prior notice!

TECHNICAL DESCRIPTION

Computer Specifications: (Standard Model) | Connector Type:

		Connector Type:
• Processor	: Intel Pentium 4 2.8GHz / Socket 478 / 533MHz FSB / 512KB Cache	
• System Chipset	: Intel 82845GE + ICH4	
• BIOS	: Award BIOS 2MBit Flash	
• PCI Slots	: 6 x PCI2.2 Slots 32-bit, 3V and 5V Interface, Full Length Profile	
• Memory	: 2 x 184 Pin DIMM Sockets, 256MB (PC2100/PC2700 (DDR266/333) DDR SDRAM)	
• Graphics Port	: 1 x AGP 4x 1.5V	
• Graphics/Refresh	: On-board Intel Extreme Graphics - Up to 2048 x 1536 - Up to 32-Bit colors - Up to 120 Hz	1 x DB15F
• IDE HDD	: 40GB 3.5", 7200 RPM, 2MB Buffer	
• CD-DRIVE	: 1 x 52x/32x/52x CD-R/W	
• IDE Controller	: 2 x IDE Ports, Ultra DMA33/66/100 (Includes PIO Mode)	
• FDD Controller	: 2 x 1.44 MB or 2.88 MB (One port)	
• Parallel Port (LPT)	: 1 x Bi-Directional Centronics with ECP or EPP mode	1 x DB25F
• Serial Ports	: 2 x RS-232 16C550 Compatible	2 x DB9M
• Ethernet	: 1 x 10/100Mbps Realtek 8100B Base-T PCI Fast Ethernet with Wake-On-Lan	1 x RJ-45
• USB Ports	: 6 x USB 2.0 (4 in back, 2 in front)	6 x USB
• Keyboard Port	: Standard PS/2 mini DIN connector	1 x PS/2
• Mouse Port	: Standard PS/2 mini DIN connector	1 x PS/2
• Audio	: AC-97 2.2 compliant, 6 channel, 5.1 speaker with LINE IN, LINE OUT, MIC IN	3 x JACKS
• Speaker	: On-board with connector for external speaker option	
• Power Manager	: APM Ver 1.2 and ACPI 1.0a	
• Monitoring	: Power supply, fan and temperature supervision	

Power Specifications:

Power Supply Options:
• 110VAC/60Hz or 230VAC/50Hz   : Model HT 403P4 STD A1 (300W)

Power Consumption:
• Operating   : TBD(TYP) - TBD (MAX)

Available Options: | Connector Type:

	Connector Type:
• Intel Celeron 2.0GHz / Socket 478 / 400MHz FSB	
• Dual Head Graphics Card, AGP 4X, 32MB Video Memory, S-Video & Composite TV-OUT	1 x DB15F
• Memory upgradeable to max 2GB	
• 3.5" Harddisk with any amount of GB	
• 8 Channel RS-232	8 x DB9M
• 2 Channel RS-232/422/485 Serial Card	2 x DB9M
• 4 Channel 10/100Mbps Network Card	4 x RJ-45
• 1 Channel 10/100Mbps Network Card	1 x RJ-45
• 1 Channel Fiber Fast Network Card	1 x ST
• More available on request	

Note: These options are factory installed.

MECHANICAL DESCRIPTION

Physical Specifications:
• 427 (W) x 176 (H) 480 (D) mm
• Weight: 12 kg (approx)
• 4U Rackmount Chassis
• Black heavy-duty steel chassis with handles
• Removable air filter
• Dual lockable latch doors

Environmental Considerations:

Safety Considerations:
Even although the test conditions for bridge units provide for a maximum operating temperature of 70°C, continuous operation of all electronic components should, if possible, take place at ambient temperatures of only 25°C. This is a necessary prerequisite for long life and low service costs.

APPROVALS & CERTIFICATES

This product have been tested / type approved by the following classification societies:

EN60945 4th (IEC945 4th)	**ClassNK** - Nippon Kaiji Kyokai
IACS E10	**GL** - Germanischer Lloyd
DNV - Det Norske Veritas	**BV** - Bureau Veritas