

Product Data Sheet

SD 8751-2E05

November 2011

Damcos® Vision Series



Damcos®


EMERSON™
Process Management

Damcos® Vision Series

Introduction

Damcos® Vision is a series of workstations used in complete Marine Tank Management (MTM) systems for visualisation and control of tank related functions on vessels:

- Valve and pump control and supervision
- Tank contents gauging and calculation
- Loading and discharging supervision
- Draft, trim and heel measurement and calculation
- Alarming
- Other kinds of calculation and automation

Damcos® Vision is based on a number of 10.4", 17" or 19" TFT monitors making the system especially qualified for mounting in panels and desks with no space for keyboard and trackball.

The monitors can also be mounted on a desktop stand that can easily be fastened to a console or desk. The monitors are available with integrated CPU enabling visualization/operation of the before mentioned MTM functions.



Features

- Robust design adapted for the marine environments
- Various installation possibilities in a panel or on a console or desk
- Wide range of monitor sizes 10.4" , 17" and 19"
- All monitors are available with touch
- 24 VDC, 230 VAC or Dual power supply
- Integrated CPU for MTM applications
- Connections of external keyboard, mouse or trackball
- Connection of Ethernet

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Items

Item	No.	Description
Vision 104	165B9052	10.4" Monitor with touch and integrated CPU
Vision 17	165B9055	17" Monitor
Vision 17 T	165B9056	17" Monitor with touch
Vision 17 C	165B9057	17" Monitor with integrated CPU
Vision 17 TC	165B9058	17" Monitor with touch and integrated CPU
Vision 19	165B9059	19" Monitor
Vision 19 T	165B9059-1	19" Monitor with touch
Vision 19 C	165B9060	19" Monitor with integrated CPU
Vision 19 TC	165B9060-1	19" Monitor with touch and integrated CPU
Vision CPU	165B9061	Standalone CPU for mounting e.g in panel, console or under a desk
Vision SCC Compact CPU	165B9153	Standalone CPU for mounting e.g in panel or console
Vision Stand	165B9062	Desktop stand for mounting of Vision 15 X, 17 X and 19 X
Vision Stand PSU 24VDC	165B9064	Desktop stand for mounting of Vision 15 X, 17 X and 19 X with integrated 24 VDC power supply unit
Vision Stand PSU Dual	165B9065	Desktop stand for mounting of Vision 15 X, 17 X and 19 X with integrated dual power supply unit 24 VDC and 100-240 VAC power supply unit
Vision PSU 100-240VAC	165B9066	100-240 VAC power supply adaptor for Vision 15 X, 17 X, 19 X and CPU
Vision PSU DIN 100-240VAC	165B9067	100-240 VAC power supply for DIN rail mounting for Vision 15 X, 17 X, 19 X and CPU
Vision PSU DIN 24 VDC	165B9068	24 V DC power supply for DIN rail mounting for Vision 15 X, 17 X, 19 X and CPU
Vision Keyboard - UK	165B9069	External keyboard UK with integrated trackball PS2
Vision Keyboard - UK	165B9070	External keyboard UK with integrated trackball USB
Vision VGA cable	165B9071	VGA Cable 1.8 meter
Vision USB cable	165B9072	USB Cable 1.8 meter
Vision PSU cable	165B9073	Power cable 1.5 meter with one connector
Vision VGA link cable	165B9074	VGA Link cable
Vision USB link cable	165B9075	USB Link cable
Vision PSU link cable	165B9076	Power Link cable

Please note:

Vision 17 C, 17 TC and 19 C are not approved to be mounted on the Vision Stand.

Vision 104 is only for panel mount.

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As a minimum Vision 17 X, 19 X and CPU require the Vision PS 100-240VAC power supply.

To build an external Dual PSU it require the Vision PSU DIN 100-240VAC and the Vision PSU DIN 24VDC.

The Vision VGA and USB (touch) cable is used to connect the Vision 17, 17 T or 19 to the Vision CPU

or an other computer.

The Vision PSU cable is used to supply the Vision 17 X, 19 X or the CPU.

The Vision VGA, USB (touch), PSU is used for "internal" wiring for Vision 17 C, 17 TC, 19 C.

The Vision 104 requires single or dual 24 VDC.

Vision Stand Installation

The Vision Stand used for console or desk mounting of Vision 17, 17 T and 19. The Vision Stand is available with different power supplies 24 VDC, 100-240 VAC or Dual supply of monitor and integrated CPU.

Installation of up to three Series 600 modules inside the Vision Base is possible. These modules can be used to interface the P-NET field bus or control local buzzers, lamps via digital outputs.

Below picture show the Vision 17 mounted on the Vision Stand:



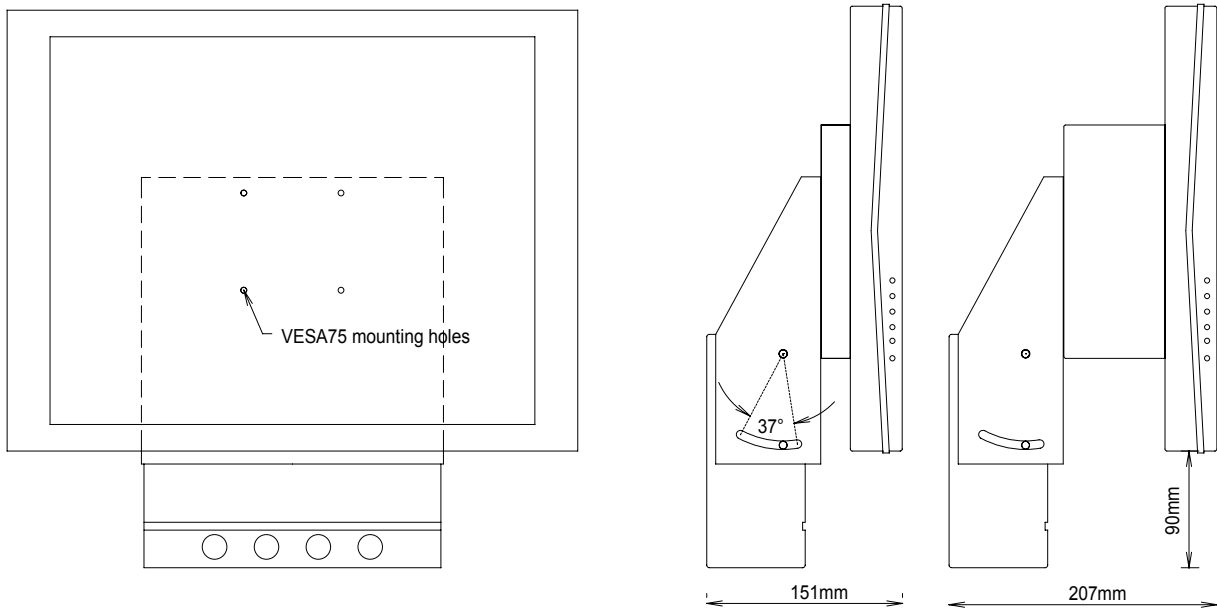
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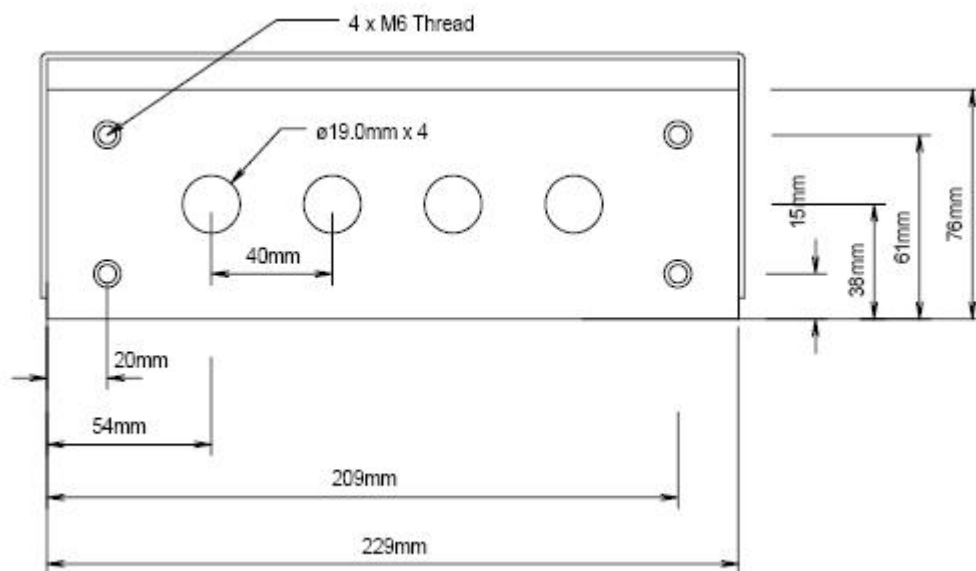
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Below illustration shows the dimensions of Vision Stand and how it can be console or desk mounted.



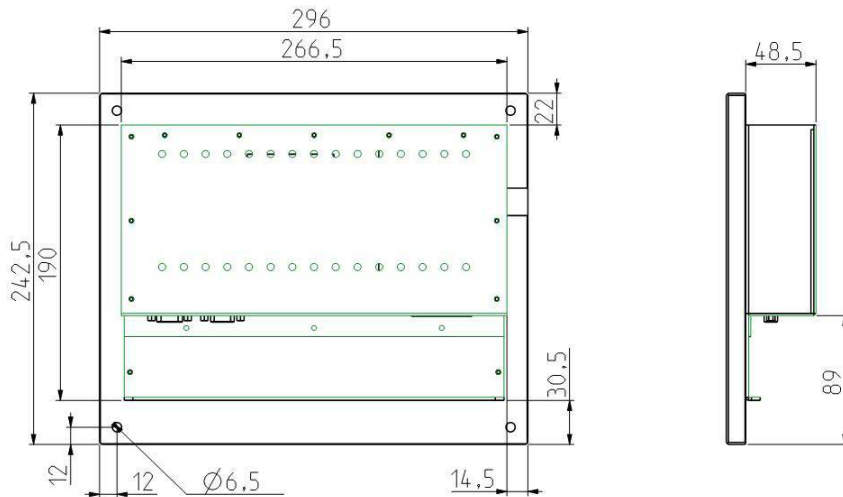
Below illustration shows the dimensions of the mounting Threads and the cable outlet (Bottom View):



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Vision 104 Panel Installation

Below illustration shows how the unit can be installed in a panel.



Vision 104 Workstation Specifications

Item	Description
Size:	10.4"
Resolution:	SVGA
Number of pixel:	800 x 600
Active area (mm):	212 x 154
Pixel pitch (mm):	0.264
Mode:	TN
Number of colors:	16.2 M
Contrast ratio (typ.):	500 : 1
Brightness (cd/m ²):	400
Response time (ms at 25°C):	< 35
Viewing angle (H/V):	120° / 100°
Interface:	2 x USB 2.0, ETHERNET 10/100
Supply voltage (V):	Single or dual 24 VDC 0.8A
Backlight:	2 CCFL
Outline dimension (mm):	296 x 242.5 x 54
Mounting:	Panel
Weight (g):	2,700
Operation temperature:	- 20 °C to + 70 °C
Storage temperature:	-25 °C to + 70 °C
Storage:	Flashdisk-drive

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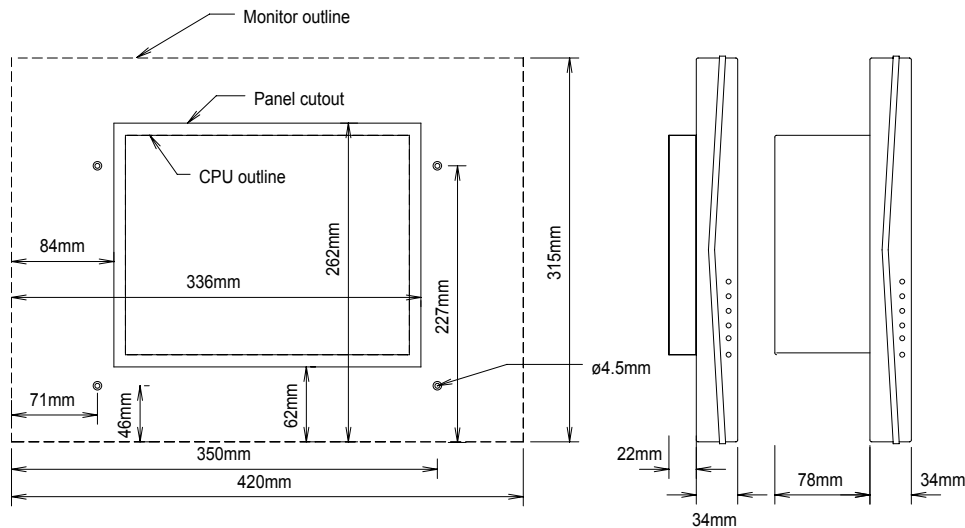
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Vision 17 Panel Installation

Below illustration shows how the unit can be installed in a panel.



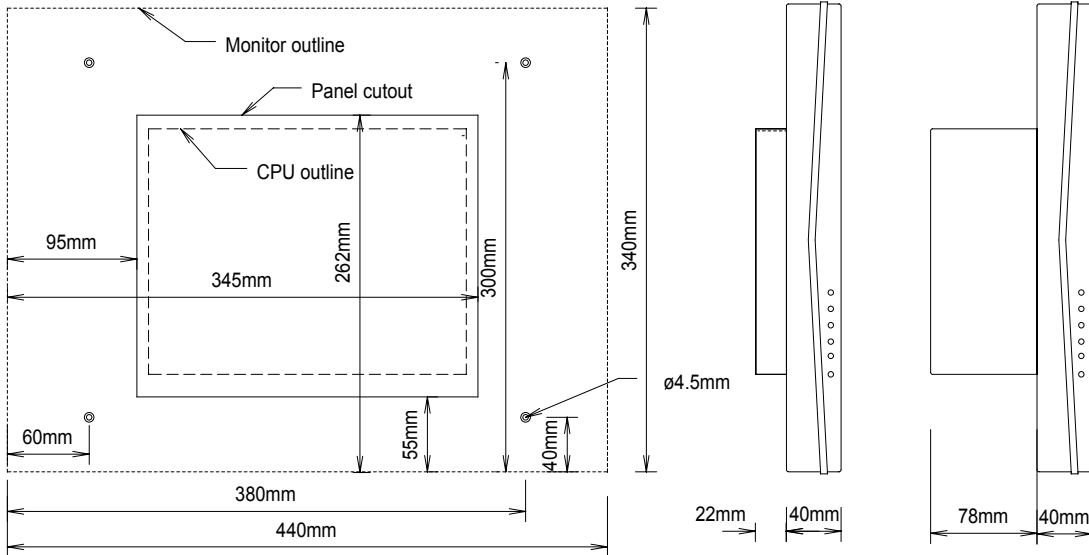
Vision 17 Monitor Specifications

Item	Description
Size:	17.0"
Resolution:	XGA
Number of pixels:	1,280 x 1,024
Active area (mm):	337.9 X 270.3
Pixel pitch (mm):	0.264
Mode:	TN
Number of colors:	16.7 M
Contrast ratio (typ.):	350 : 1
Brightness (cd/m ²):	250
Response time (ms at 25°C):	< 25
Viewing angle (U/D/L/R):	60/60/70/70
Interface:	Analog RGB
Supply voltage (V):	12
Backlight:	4 CCFL
Outline dimension (mm):	420 x 315 x 34 (+22 or +78)
Mounting:	VESA75 or in panel
Weight (g):	5,500
Operating temperature:	0 °C to + 55 °C
Storage temperature:	-25 °C to + 60 °C

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Vision 19 Panel Installation

Below illustration shows how the unit can be installed in a panel.



Vision 19 Monitor Specifications

Item	Description
Size:	19.0"
Resolution:	XGA
Number of pixel:	1,280 x 1,024
Active area (mm):	386 X 290
Pixel pitch (mm):	0.294
Mode:	PVA
Number of colors:	16.7 M
Contrast ratio (typ.):	500 : 1
Brightness (cd/m ²):	250
Response time (ms at 25°C):	< 25
Viewing angle (U/D/L/R):	80/80/80/80
Interface:	Analog RGB
Supply voltage (V):	12
Backlight:	4 CCFL
Outline dimension (mm):	440 x 340 x 40 (+22 or +78)
Mounting:	VESA75 or in panel
Weight (g)	7,000
Operating temperature:	0 °C to + 55 °C
Storage temperature:	-25 °C to + 60 °C

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Vision 104, 17, 17T, 19 Connections

Below illustration shows all external connecting options to the Vision monitors (Vision 10.4 upper picture and Vision 17, 17T and 19 lower picture).

Below illustration shows Vision 104 power plug.

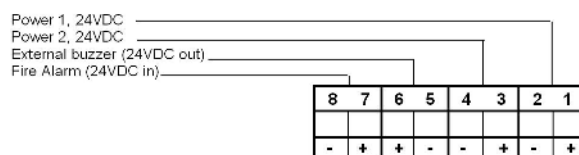


Network USB

Power, External buzzer and Fire Alarm



Touch Power VGA



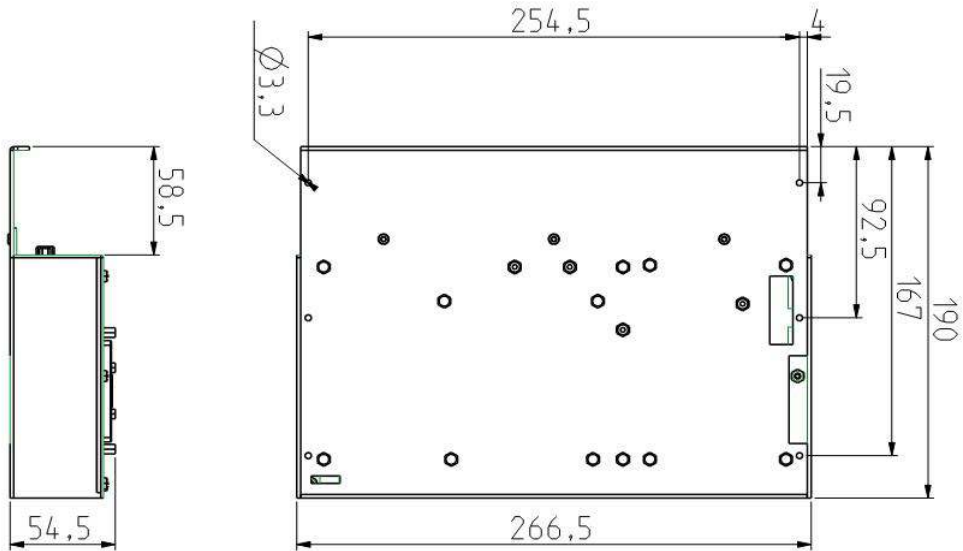
Vision Touch Specifications

Item	Description
Type:	3M MicroTouch 5-wire Resistive Touch Screen
Operating devices:	Stylus, finger, gloved hand, pen or tool
True position error:	=< 1% within Precision Area (Precision Area is the center 96% of X and Y active area dimensions) Outside precision area, linearly increasing to 2 % at the edge of the active area.
Activation force:	Stylus: <25g average with plastic stylus with 1 mm radius, full hemispherical tip. Finger:<50g average with 5/8" diameter silicone finger.
Chemical resistance: The touch screen surface finish is unaffected by exposure to the following chemicals for a period of one hour at 22C, 45% relative humidity. ASTM-F-1598-95.	Tea, Coffee, Ketchup, Mustard, Vinegar, Beer, Coca-Cola, Red Wine, Cooking Oil, Wisk Laundry Detergent, Fantastik All Purpose Cleaner, Joy Dishwashing Liquid, Windex, Formula 409 Cleaner, Clorox Bleach (5.25%), Hydrogen Peroxide (3%), Lysol, Ethyl Alcohol, Isopropyl Alcohol, Acetone, Methyl Ethyl Ketone (MEK), Toluene, Concentrated Hydrochloric Acid, Naptha, Miniral Spirits, Gasoline, 10W30 Motor Oil, Diesel Fuel, Transmission Fluid, Brake Fluid, Antifreeze, Hydraulic Oil.

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Vision SCC Compact PC Installation

Below illustration shows how the unit can be installed in a panel or below a desk.



Vision SCC Compact PC Connections

Below illustration shows all external connecting options to the Vision CPU.

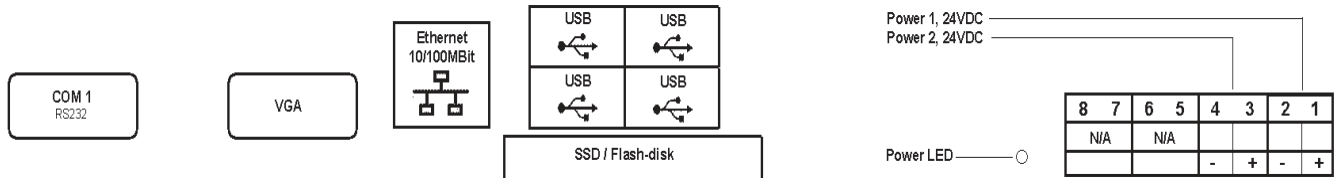


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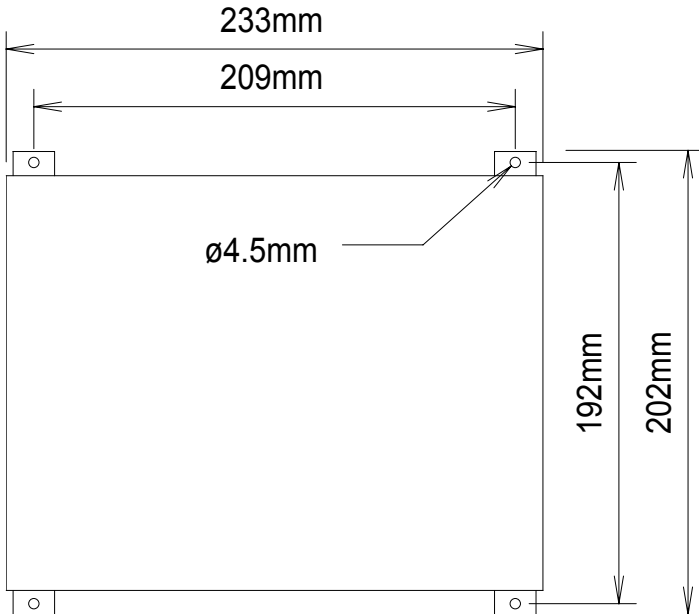
Vision SCC Compact PC Specifications

Item	Description
Form factor:	EPIC, Industrial motherboard 145mm x 100mm
Processor:	AMD Geode LX 800 + CS5536, Fanless
Main memory:	1 x 200-pin SO-DIMM socket support 200MHz DDR SDRAM up to 1GB
LAN	10/100/1000Base-Tx Fast Ethernet compatible
Graphics:	Integrated 2D engine up to 64MB shared system memory
Expansion slots:	None
Hard disk drive:	SSD-Flash
Front side bus:	500MHz
Supply voltage:	24V @ 0.8A
Power supply:	External 24 V DC
I/O Ports:	4 x USB 2.0 6 x RS-232/485 2 x LAN 10/100/100 1 x VGA PS/2 Keyboard/Mouse
Outline dimension (mm):	265 x 190 x 48
Mounting:	Mounting plate
Weight (kg):	1.5
Operating temperature:	-25°C to + 70°C

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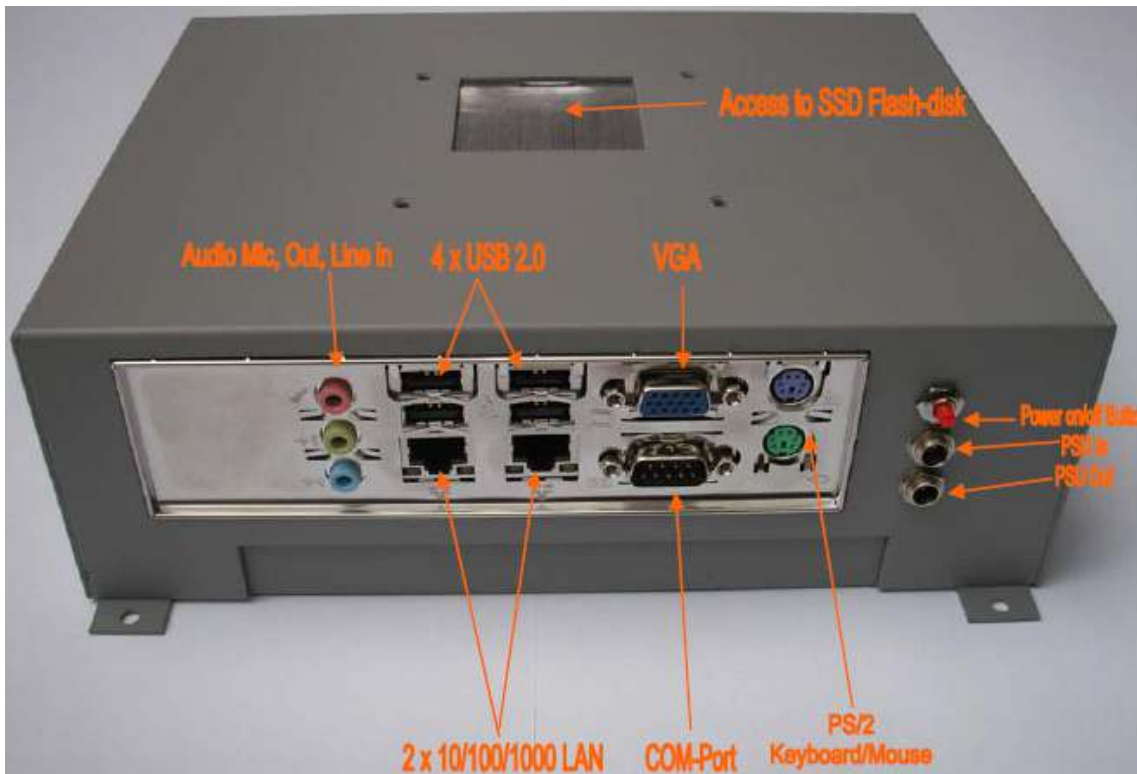
Vision CPU Installation

Below illustration shows how the unit can be installed in a panel or below a desk.



Vision CPU Connections

Below illustration shows all external connecting options to the Vision CPU.



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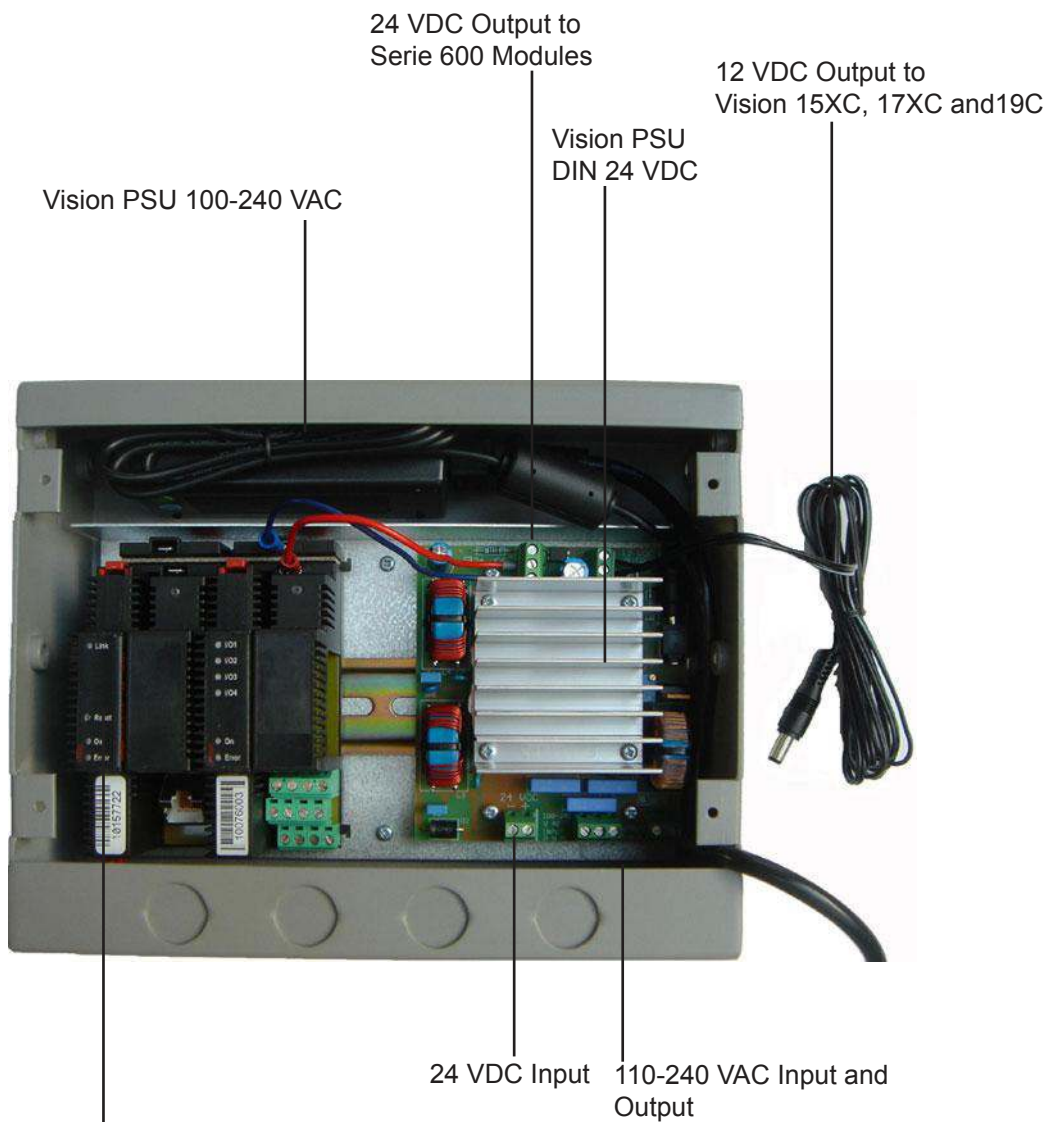
Vision CPU Specifications

Item	Description
Form factor:	Mini-ITX, Industrial motherboard 170mm x 170mm
Processor:	Celeron M 1.8GHz, Fanless Auto throttling control if CPU overheats
Main memory:	512MB installed in one socket. 2x 240-pin DIMM socket. Supports up to 4GB Dual Channel DDR2 533/667 SDRAM
LAN	10/100/1000Base-Tx Fast Ethernet compatible
Graphics:	Integrated Intel Graphics Media Accelerator 950
Expansion slots:	None
Hard disk drive:	SSD-Flash
Floppy/CD-ROM:	External USB
Supply voltage:	12V @ 2.5A
Power supply:	External 230V AC/12 V DC External 24 V DC/12 V DC
I/O Ports:	3 Audio jacks, Mic in, Line in, CD Audio in, Line out 4 x USB 2.0 1 x RS-232 2 x LAN 10/100/100 1 x VGA PS/2 Keyboard/Mouse
Outline dimension (mm):	233 x 180 x 78
Mounting:	VESA75 or on mounting plate
Weight (g):	3.050
Operating temperature:	-25°C to + 70°C

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Vision Stand PSU Dual

Below picture shows the unit.



Option:

Up to 2 pcs. Serie 600 Modules can be installed in the Vision Stand.

Example:

PD602 DPI with Ethernet

PD620 Alarmoutputs to horn and light

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Vision PSU 100-240 VAC

Below picture shows the unit.

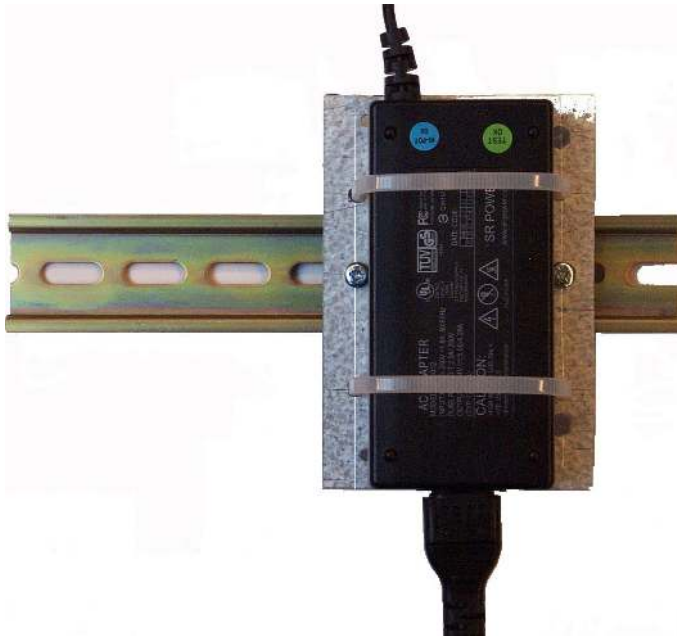


Item	Description
AC input:	100-240VAC ~ 1.8 A 50-60 Hz
DC output:	12 VDC 4.58 A
Fuse rating:	T2.5A / 250V OR 300V

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Vision PSU DIN 100-240 VAC

Below picture shows the unit.



Item	Description
AC input:	100-240VAC ~ 1.8 A 50-60 Hz
DC output:	12 VDC 4.58 A
Fuse rating:	T2.5A / 250V OR 300V
Mounting:	DIN RAIL

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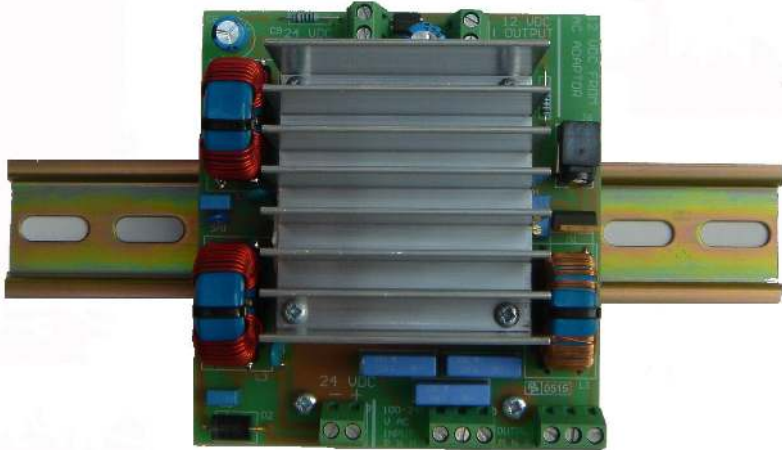
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Vision PSU DIN 24 VDC

Below picture shows the unit.



Item	Description
DC input:	18...36 VDC
DC output:	12 VDC Max. 4.16 A
Load regulation (100...0)%:	+/- 0.2% max.
Isolation voltage:	Input/Output 1500VDC Input/Case 1500VDC Output/Case 1500VDC
MTBF (MIL-HB 217E at 25C):	> 1.000.000 hrs.
Storage temperature:	-55 to +105 C
Thermal shutdown range:	Tcase 100C
Current limit:	110 to 150% Nominal output
Over voltage protection:	115 to 140%
Undervoltage lockout:	24Vin power up @ 17.0V 24Vin power down @ 16.0V

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Vision Keyboard

Below picture show the Vision keyboard.



Maritime approvals

Det Norske Veritas
Lloyd's Register of Shipping
Bureau Veritas
Germanischer Lloyd
American Bureau of Shipping

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