



Solutions for Demanding Applications

19" Purged Enclosed Computer for Class 1 Div 1 Environments



The VT950ESC is a NEMA 4X HMI system designed to meet Class 1, Div 1 protection. The purge system uses an automatic pressure switch to automatically trigger alarms in case of pressure loss.

Durable

The VT950ESC can easily handle the punishment of harsh computing environments. They are proven tough in real world applications such as industrial production areas, outdoor kiosks and public terminals.

The VT950ESC chassis has no external vents, so nothing can get under its skin, including dust, dirt, moisture, oil, chemicals or other harsh contaminants.

A hard-anodized aluminum heat exchanger and internal heat management system keep it cool in environments where ambient temperatures approach 60°C -- without using outside air.

Easy Access

VT950ESC are designed with easy maintenance and up-grades in mind. A latched panel provides simple access to this NEMA 4X HMI system. With its moderate weight and dimensions, VT950ESC enables flexible mounting options.

SPECIFICATIONS

Display

19", 1280 x 1024 SXGA

Processor

T4500 2.30 GHz 800MHz FSB Intel Dual Core

BIOS

Phoenix-Award 16Mbit (SPI) with RPL/PXE
LAN Boot ROM, SmartView and customer
CMOS backup

O/S

Windows XP Professional
(optional Windows Embedded Standard or
Windows 7)

System Memory

2 DDR2 533/667 SDRAM sockets, 2 GB
standard, 4 GB optional (~3.25 recognizable)

Graphics

Intel® GME965 GMCH Gen 4 Integrated
graphics engine

LAN

Integrated Intel Gigabit PCI Express LAN
Chip

Hard Drive

320 GB Fast Access SATA drive

Power Input

12 VDC Optional: 12/24 VDC AC by available
brick, 6 to 32V DC

Power Connector

Standard Power Inlet (IEC320 C14)

Power Consumption

40W max

Dimensions

20" W x 18" D x 11" H

PCI Expansion Slots

Optional PCI Express, Optional 1 or 2 32 bit
PCI Slots

DVD Drive (E-IDE / ATAPI)

DVD-R, DVD+R, DVD-RW, DVD+RW, DVD-R
DL, DVD+R9, CD-R, CD-RW

I/O Ports

Back - 3 RS-232 COM port (Optional RS-422
\485 port), 2 LAN ports, 4 USB 2.0, 2 Audio
jacks

Front - 2 USB 2.0

Firewire Ports

2 x IEEE 1394a

Temperature

Operational: 41°F to 140°F/5°C to 60°C,
Storage: -40°F to 149°F/-40°C to 65°C

Humidity

Operational: 10 ~ 80% (relative; non
condensing)

Construction

316 stainless steel
Anodized aluminum heat sink

10" handles

Waterproof and dustproof

Enclosure Only:

18" H x 20" W x 11" D, 66 lb

Purge System Only:

20" (H) x 11" (W) x 10.5" (D), 38 lb

FEATURES

- ◆ Designed to Meet Class 1 Division 1
- ◆ Purged pressure switch
- ◆ NEMA 4x sealed enclosure
- ◆ Water proof and dust proof
- ◆ Stainless steel construction
- ◆ Easy latch access
- ◆ Hard-anodized aluminum heat sink
- ◆ Closed loop thermal cooling for high heat environments
- ◆ Medium footprint
- ◆ Flexible mounting options
- ◆ Keyboard/mouse optional

*Supports all VESA standard video formats

CONTACT

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OPTIONS

- Purge System Mounting to Side (L/R), Top or Bottom
- Windows Embedded Standard or Windows 7
- 12/24 VDC AC by available brick, 6 to 32V DC
- Optional PCI Express, Optional 1 or 2 32 bit PCI Slots
- Optional RS-422\485 port

****Purge System w/Pressure Switch Next Page****



Purge System w/
Pressure Switch

Purge System w/ Pressure Switch (Class 1, Div 1 Protection)

This Rapid Exchange® purging system operates on a supply of compressed instrument air or inert gas. It regulates and monitors pressure within sealed (protected) enclosure(s), in order to prevent combustible dust accumulation or remove and prevent flammable gas or vapor accumulations. The system accomplishes four air exchanges and maintains a "safe" (0.25") pressure. The system includes an Electrical Power Control Unit (EPCU) that monitors system operation and controls enclosure power. All start-up requirements must be satisfied before the EPCU will energize power to the enclosure(s). These processes reduce the hazardous (classified) area rating within the enclosure(s), in accordance with the NEC - NFPA 70, Article 500, NFPA 496 and ISA 12.4.

MATERIAL SPEC

Regulator Body

Zinc w/ Enamel Finish

Regulator Handle

Polycarbonate

Enclosure Pressure Gauge

Alum. w/ Enamel Finish

Tube Fittings

316 SS Forged Body

Tubing

316 SS 1/4" .035 Welded

System Nameplates

Silk screened Lexan® & SS

Fastener Hardware

SS Screws & Bolts

Mounting Plate

316 14 Ga #3 Brush SS

EPCU Enclosed Body

Bead Blast Cast Alum.

Enclosure Warning

Nameplate

Silkscreened SS

Lexan® is a registered trademark of the General Electric Company.

Specifications

Weight

38lb

Temp. Range

-20F to 120F

Supply Pressure Range

5 - 120 psi

Supply requirements

Clean air or inert gas

Safe Pressure Setpoint

.25" / 1.0"

Safe Pressure Flow Rate

0.1 - 3.5 SCFH - Enclosure integrity determines actual flow rate

Safe Pressure Flow Rate

4 SCFM / 240 SCFH - With regulator set to 60 psi min. during exchange

Exchange Time

As required - Time required to exchange 4 volumes within the enclosure(s), based on actual measured safe pressure flow rate or 5 minutes, whichever is greater

System Supply Port

1/4" tube fitting

Enclosure Supply Fitting

1/4" tube fitting

Enclosure Reference Fitting

1/4" tube fitting

EPCU Conduit Port Size

1/2" FPT

EPCU Power Requirements

120 VAC 60Hz 10

EPCU Power Consumption

500mA

Dimensions

20" (H) x 11" (W) x 10.5" (D)

Height & Width dimensions reflect mounting plate measurements. Depth dimensions reflects overall measurement of system, including components.

Mounting

Side (L/R), Top or Bottom

OPERATION

In accordance with system instructions, start-up requires air supply to be engaged and EPCU power to be energized. The system must perform an exchange cycle (determined by the safe pressure flow rate — 5 minutes minimum) before power can be energized. Loss of safe pressure causes the EPCU to deenergize power to the protected enclosure(s). The purge system includes an explosion proof differential pressure switch with form "C" contacts for audible or visual alarm systems.

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