

Dimension Vista[®] 500 Intelligent Lab System Instrument Specification

Effective: April 2009



Instrument Weight and Dimensions

Weight

842 kg (1,856 lb)

Dimensions

- 215.3cm (84 3/4") wide X 141.2cm (55 1/2") high (without monitor) X 111.5cm (43 7/8") deep.
- 204cm (80 3/8") high, cover open.

Additional Instrument Clearances (Minimum)

- Service clearance in back - 60cm (23 5/8")
- Operator clearance in front - 1m (39 3/8")
- Doorway opening for installation - 88cm (34 5/8") after removal of front cover, door and frame parts.
- Usable power cord is 3.1m (120") to wall.

No leveling required. Front brakes lock in place.

360° access is needed for service. Installation and service require at least 60cm (23 5/8") of working space on every side and the back. (see the diagram on the third page).

The UPS must be installed in the same room as the instrument.

The UPS (6 kVA) overall measurement and rear clearance for connection is: 25.8cm (10.2") wide X 100.2cm (39.4") high X 72.6cm (28.6") depth and weighs 152.7kg (336.6 lb). Minimum clearance 102mm (4") on all 4 sides for proper ventilation.

SIEMENS

Room Environment

Operating Temperature

Room temperature must be 18 - 25°C (64.4 - 77°F) with a maximum fluctuation of 2.8°C (5°F) per hour. The system requires a minimum of 90 minutes to warm up from a cold start to the incubation temperature.

Relative Humidity

Maintain between 20% and 80%.

Average Noise Output

64dBA at normal operator position.

Purified Water Consumption

- 10.8 L / hr

Waste Requirements

Liquid Waste Output at Maximum Throughput

- Millipore fresh water: 120 L/hr (32 G/hr)
- Biowaste: 20 L/hr (5.25 G/hr)
- Total: 140 L/hr (37 G/hr)

A 15.24m (50') tube is supplied for external waste disposal. Maintenance of the waste tubing from the instrument to the disposal point is the responsibility of the user. The disposal point should be selected in accordance with local hazardous waste guidelines.

Electrical Installation Requirements

Recommended Service Outlet

- 208-220 VAC, 60 Hz, Single Phase, 50 A 2-pole, 3-wire grounding (North America)
- 230-240 VAC, 50 Hz, Single Phase, 32 A 2-pole, 3-wire grounding (EU)
- 200 VAC, 50/60 Hz, Single Phase, 30 A 2-pole, 3-wire grounding (Japan)

Transient Overvoltage

Installation Category II (branch circuit)

Average Thermal Output

| Location | V | HZ | BTU/Hr |
|---------------|---------|----|--------|
| North America | 208 | 60 | 13,500 |
| | 220 | 60 | 13,300 |
| Europe | 240/220 | 50 | 13,100 |
| Japan | 200 | 50 | 13,000 |

Water Requirements

| Dissolved Solids | | Feed Water Requirements | |
|------------------------|---------------------|---------------------------------|---|
| Total dissolved solids | < 2000 µs/cm | Feed water connection | 1/2" NPT male |
| Iron | < 0.1 ppm as CaCO3 | Feed water temperature | 30 °C ± 3 |
| Aluminum | < 0.05 ppm as CaCO3 | Feed water tubing | 10mm OD (3/8" OD) - 6.35mm ID (1/4" ID) |
| Manganese | < 0.05 ppm as CaCO3 | Feed capacity | min 120 L/hr (37 G/hr) |
| PH | 4 - 10 | Feed water pressure | min 2.0 bar (30 psi) max 6.0 bar (90 psi) |
| CO2 | < 30 ppm | WPM Reject Water Drain capacity | 120 L/h (32 G/h) |
| Fouling index | < 12 | WPM Reject Water Drain tubing | 10mm OD (3/8" OD) - 6.35mm ID (1/4" ID) max length: 10m (32.8') max height: 3m (9 1/2 ft) |
| Total Chlorine | < 3 ppm | | |
| Total organic carbon | < 500 ppb | | |

Receptacle

| Terminal | Conductor |
|------------------|--|
| Green, Grnd, G | Equipment grounding conductor (bare, green, or green/yellow) |
| White, W | Grounded circuit conductor, Neutral (white or gray) |
| X, Y, Z or Black | Ungrounded circuit conductor, Line (not white, not green). |

Circuit

The instrument should have a separate, dedicated line with Hot, Neutral, and Isolated Ground in its own conduit. The conduit should start at the distribution panel and be continuous to the receptacle. Three-wire distribution to

the receptacle is required for each instrument. The third (green or green/yellow) ground wire should start at the distribution panel and be continuous to the receptacle in accordance with NEC paragraph 250.146 (D), exception 4, unless local codes prohibit. The ground wire should not be tied to grounds from other loads.

Wire Size

6 AWG wire is required to minimize the voltage drop between the distribution panel and the receptacle when each instrument operates at full current load.

Receptacle

Customer must provide a Hospital Grade receptacle, installed by a qualified electrician before arrival of the instrument. The receptacle must be accessible to the 3.1m (10 ft) power cord furnished with the instrument.

The USA requires Twist Lock, 50 Ampere, 250 Volts Receptacle, Hubbell/ Bryant Receptacle # CS8269A.

Electromagnetic Radiation

Do not locate the instrument within 15m (49 1/4 ft) in any direction of an electromagnetic radiation source such as diathermy apparatus.

Emission Compliance

The Dimension Vista[®] 500 System has been designed and tested to CISPR 22 Class A. In a domestic environment it may cause radio interference, in which case you may need to take measures to mitigate the interference.

Handheld Barcode Scanner

The handheld barcode scanner uses Class I LEDs (light-emitting diodes) which are classified as non dangerous to the eyes or skin.

Aliquot Plate Barcode Reader

The aliquot plate barcode reader, located toward the back of the instrument to the left of the aliquot lane one is a Class II laser. This is a possible eye hazard.

Installation

A qualified Siemens representative will install the Dimension Vista[®] 500 System. The installation will include checkout of all aspects necessary to ensure the equipment is fully operational.

Summary of Typical Input Power Measurements Made Under Test Conditions

| Region | Transformer Tap (V)† | Freq. (Hz) | % Tap | (Vrms) | A | PF | kW |
|---------------|----------------------|------------|-------|--------|------|-------|------|
| North America | 220 | 60 | +10 | 242 | 16.2 | 0.976 | 3.82 |
| | | | 0 | 220 | 17.5 | 0.975 | 3.77 |
| | | | -10 | 198 | 19.7 | 0.977 | 3.78 |
| Europe | 240/220 | 50 | +10 | 264 | 14.4 | 0.918 | 3.54 |
| | | | 0 | 240 | 15.0 | 0.952 | 3.46 |
| | | | -10 | 216 | 16.7 | 0.966 | 3.50 |
| Japan | 200 | 50 / 60 | +10 | 220 | 19.2 | 0.952 | 4.10 |
| | | | 0 | 200 | 19.7 | 0.977 | 3.87 |
| | | | -10 | 180 | 22.3 | 0.977 | 4.00 |

* Note: measurements displayed are for active (non-standby) operation, including air compressor.

† UPS output adjusted to nominal tap voltage for all measurements.

Leakage Current

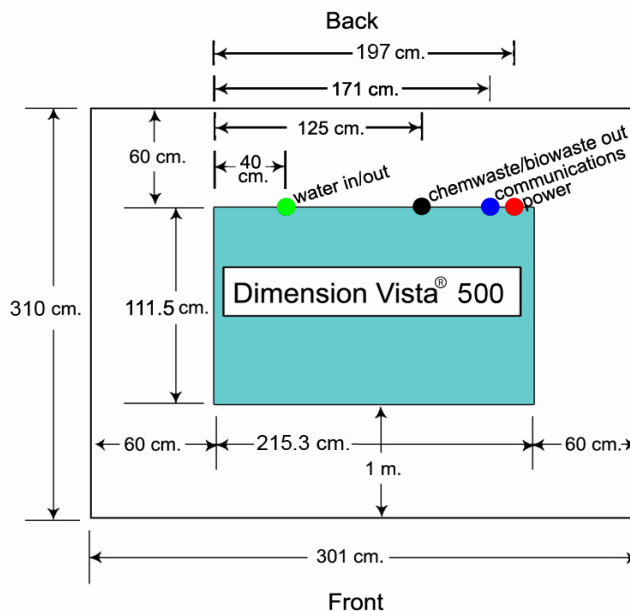
| | 230 VAC/50-60 Hz |
|---------------------------|------------------|
| Normal Supply Connections | Under 100 µA |
| Ground Disconnected | Under 150 µA |
| Measurement Standard | EN61010-1 |

Code Compliance

Safety Compliance

The Dimension Vista[®] 500 System has been designed and tested to comply with safety standards UL6101-1, CSA C22.2#61010.1 and EN61010-1 under the following environmental conditions [subclause 1.4]

| | |
|----------------------|--|
| Temperature | 5°C (41°F) to 40°C (104°F) |
| Humidity | Maximum 80% at 25°C (77°F) to 50% at 40°C (104°F) |
| Altitude | Maximum 2000m (6,561 ft) |
| Main Supply | 230±10% VAC, (allows 200-220-240 VAC input) 50/60Hz |
| Overvoltage Category | Category II, connected to a branch circuit |
| Pollution Degree | Degree 2, normal indoor laboratory environment. Air contains only non-conductive pollutants with occasional condensation. |



EasyLink™ Informatics System Installation Specifications

Power Requirements

2 typical grounded wall sockets are required. One each for the UPS and printer.

- 115/230 VAC 20
- 60/50 Hz
- 20 AMP

Internet Requirements

The workstation will require a connection to the internet via the hospital network. In order to accomplish this in a secure fashion an Ethernet connection that supports HTTPS is needed along with access to a representative of the hospital IT department during installation. Physical connection is via a RJ-45 connector.

Host Interfacing

For a networked LIS, an RJ-45 Ethernet connection will be needed. Serial LIS communication is supported through a DB-25 female connector. Interface protocol is Siemens ASTM. Reference *Siemens ASTM Implementation Guide* document D-00978 and *Siemens Method, Instrument, and Comment Codes* document D-00979.

Dimensions

| Component | Measurement | | | |
|-----------|------------------|------------------|------------------|------------------|
| | Width | Depth | Height | Weight |
| CPU | 38.9cm (15 3/8") | 43.2cm (17") | 10.7cm (4 1/4") | 10kg (22 1/2 lb) |
| Monitor | 38.4cm (5 1/8") | 18cm (7 1/8") | 39.1cm (15 1/2") | 3.6kg (8 lb) |
| Printer | 41.4cm (16 3/8") | 48.5cm (19 1/8") | 15cm (6") | 8.6kg (19 lb) |
| UPS | 22.8cm (9") | 33cm (13") | 25.4cm (10") | 27.2kg (60 lb) |

For additional information or to reach a Siemens representative, please call 1-800-393-9362

© 2006, 2008 Siemens Healthcare Diagnostics Inc.

Dimension Vista® is a trademark of Siemens Healthcare Diagnostics.

D-01493 April 2009

Siemens Healthcare Diagnostics Inc.
Newark, DE 19714 USA

www.siemens.com/diagnostics