

Dimension Vista[®] 1000T Intelligent Lab System Instrument Specification

Effective: April 2009



Instrument Weight and Dimensions

Weight

1694 kg (3,735 lb)

Dimensions

- 422cm (166 1/4") wide X 141.2cm (55 1/2") high (without monitor) X 146cm (57 1/2") 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 for each Vista[®] 500 unit.

Leveling is required, front and rear leveling feet adjust to align instruments and 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 last page).

The 2 UPSs must be installed in the same room as the instrument.

The UPS 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.

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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

70 dBA at normal operator position.

Purified Water Consumption

- 10.8 L / hr (per instrument)

Waste Requirements

Liquid Waste Output at Maximum Throughput (per Twin System)

- Millipore fresh reject water: 240 L/hr (64 G/hr)
- Biowaste: 40 L/hr (10.5 G/hr)
- Total: 280 L/hr (74.5 G/hr)

Two 15.24m (50') tube are 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

- 2 (two) 208-220 VAC, 60 Hz, Single Phase, 50 A 2-pole, 3-wire grounding (North America)
- 2 (two) 230-240 VAC, 50 Hz, Single Phase, 32 A 2-pole, 3-wire grounding (EU)
- 2 (two) 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	27,000*
	220	60	26,600*
Europe	240/220	50	26,200*
Japan	200	50	26,600*

*Per Twin System

Water Requirements

Dissolved Solids		Feed Water Requirements (per instrument)	
Total dissolved solids	< 2000 µs/cm	Feed water connection	1/2" NPT male
Iron	< 0.1 ppm as CaCO ₃	Feed water temperature	30 °C ± 3
Aluminum	< 0.05 ppm as CaCO ₃	Feed water tubing	10mm OD (3/8" OD) - 6.35mm ID (1/4" ID)
Manganese	< 0.05 ppm as CaCO ₃	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)
CO ₂	< 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 two separate, dedicated lines with Hot, Neutral, and Isolated Grounds in their own conduit. Each 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 two Hospital Grade receptacles, installed by a qualified electrician before arrival of the instrument. The receptacles must be accessible to the 3.1m (10 ft) power cord furnished with the instrument.

The USA requires two Twist Lock, 50 Ampere, 250 Volts Receptacles, 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® 1000T 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® 1000T System. The installation will include checkout of all aspects necessary to ensure the equipment is fully operational.

Summary of Typical Power Measurement 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

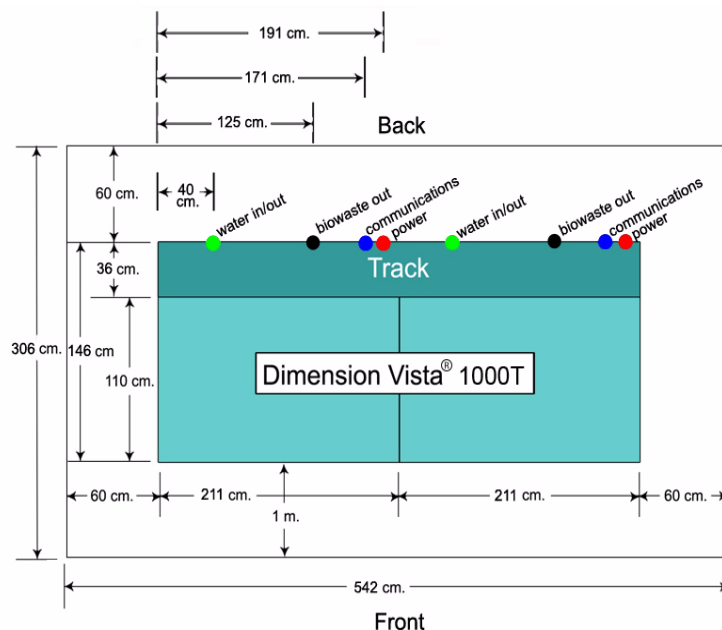
	230 VAC/50-60 Hz
Normal Supply Connections	Under 100 µA
Ground Disconnected	Under 150 µA
Measurement Standard	EN61010-1

Code Compliance

Safety Compliance

The Dimension Vista® 1000T 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

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