

Specially designed for your lab.

Because every test is the most important one.

The ORTHO VISION $^{\scriptscriptstyle{\text{TM}}}$ Max Analyzer Technical Specifications





Intended Use

ORTHO VISION™ Max Analyzer automates in vitro Immunohematology testing of human blood utilizing ORTHO BioVue® Cassette technology.

ORTHO VISION™ Max Analyzer:

- Automates test processing functions including liquid pipetting, reagent handling, incubation, centrifugation, reaction grading and interpretation and data management requirements using ORTHO BioVue® Cassettes and digital image processing.
- Standalone instrument or interfaced to the Laboratory Information System (LIS).

Installation and Site Specifications

Although trained service personnel install the ORTHO VISION™ Max Analyzer at the laboratory site, the site must be prepared according to site specifications.

Physical Dimensions

ORTHO VISION™ Max Analyzer

Width: 169 cm (66.5 in.) Depth: 77.8 cm (30.6 in.) Height: 93.9 cm (37 in.)

Height with maintenance door open: 133.8 cm (52.7 in)

ORTHO VISION™ Max Table Dimensions (highly recommended)

Table without shelf:

182.8 cm (72 in.) x 76.2 (30 in.) x 76.2 (30 in.)

Table with shelf at the front:

182.8 cm (72 in.) x 106.7 (42 in.) x 76.2 (30 in.)

Table with the shelf on the side:

243.8 cm (96 in.) x 76.2 (30 in.) x 76.2 (30 in.)

- Occupies 61 cm (24 in.) in depth on left side – side of table

Weights

ORTHO VISION™ Max Analyzer: 330 kg (727.5 lbs) ORTHO VISION™ Max Table: 113.4 kg (250 lbs)

Power Requirements

One dedicated (3-wired single phase; line-neutral and single circuit) AC power line for connection to facility power.

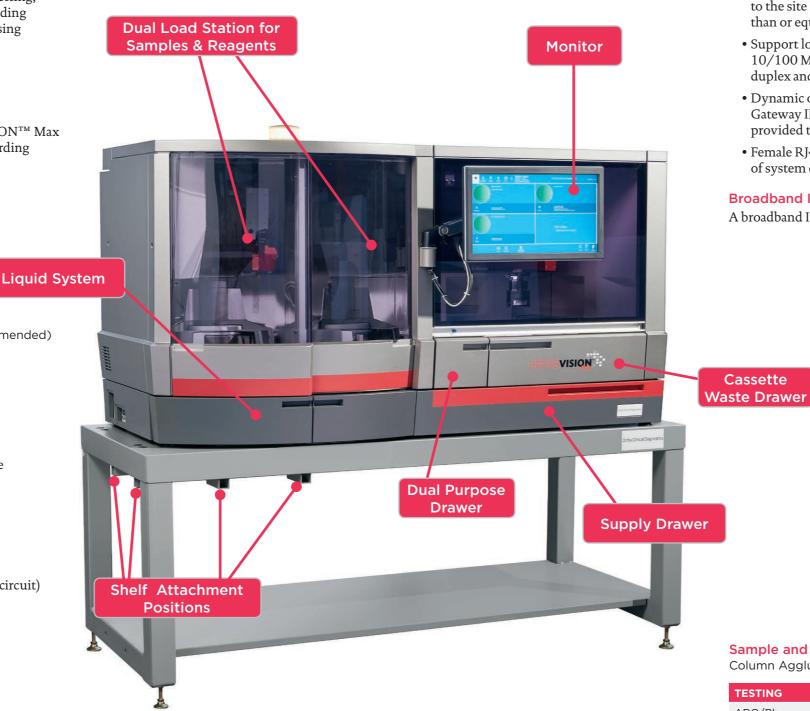
Input Voltage $100 - 240 \, \text{V} \, \text{AC} \, 50/60 \, \text{Hz} \, 1000 \, \text{VA}$

Environmental Specifications

- Operating Temperature: 18 30° C (64.4 86.0° F)
- Site Relative Humidity: 15 85% RH (non-condensing)
- Maximum Altitude: 2438.0 m (8000 ft.)
- Heat Output: 5886 BTU/hr

e-Connectivity® Remote Connectivity

Provides the ability to connect your system to Ortho Clinical Diagnostics in a way that enables remote diagnostics as well as, monitor and review system configuration, data, and performance.



e-Connectivity® Technology Ready **Network Connection Requirements:**

- Category 5e cable with male RJ45 connector for SSL connection included.
- Continuous broadband connection or direct connection to the site LAN with access to the Internet at a speed greater than or equal to 128 kbps.
- Support local area network port speeds of automatic, 10/100 Mbps with half and full duplex, and 1 Gb full duplex and automatic detection of duplex.
- Dynamic or Static IP Address, Subnet Mask and Default Gateway IP Address assigned by the IT department and provided to OCD.
- Female RJ45 connector on network port within 20 feet of system center.

Broadband Internet

A broadband Internet connection is required

Supported Sample Types

- Centrifuged whole blood
- Plasma and Serum
- Packed red blood cells
- 3-5% Red cell suspension (Pre-diluted Patient/Donor)
- 0.8% Red cell suspension (Pre-diluted Patient/Donor)

Supported Sample Tube Sizes

- 16 x 100 mm, 16 x 75 mm
- 12-13 x 100 mm, 12-13 x 75 mm
- 10.25 x 75 mm, 10.25 x 64 mm, 10.25 x 47mm
- 15 x 92 mm Sarstedt
- 13 x 90 mm Sarstedt
- 2.0 mL and 1.5 mL micro-collection containers
- Wide variety of Pediatric Tubes

Sample and Test Processing

Continuous, random, STAT access and batch

Sample and Test Performance Characteristics

Column Agglutination Technology using ORTHO BioVue® Cassettes

TESTING		
ABO/Rh	Rh	Rh/K
Antibody Screen	Antibody Identification	Crossmatch
Direct Antiglobulin	Antigen Testing	QC Testing
Serial Dilutions for Titration Studies		

REAGENT TYPES		
ORTHO BioVue® Cassettes	Reagent Red Blood Cells	Diluents
Quality Control		

System Performance Specifications

CAPACITY		
Samples	Up to 84 samples can be loaded, 12 Sample Racks holding 7 tubes each	
ORTHO BioVue® Supply Drawer	240 ORTHO BioVue® Cassettes (12 sleeves of 20)	
Reagent Red Blood Cell Supply	Supports 6 independent RBC racks, each can hold 11-3 mL vials or 6-10 mL vials, including various combinations. The 10 mL rack can accommodate reverse grouping and antibody detection (screen) RRBC. The 3 mL rack can accommodate reverse group, antibody detection and antibody identification RRBC.	
Diluent	 14 bottles (ORTHO BioVue® Cassettes) 2 x 50 mL position for ORTHO® BLISS 2 x 50 mL position for Red Cell Diluent 10 x 10 mL positions for red cell diluents 	
Heated Incubator	12 ORTHO BioVue® Cassettes	
Room Temperature Incubator	24 ORTHO BioVue® Cassettes	
Centrifuge	2 centrifuges; 10 ORTHO BioVue® Cassettes per centrifuge	
Waste	5.2 liters 150 ORTHO BioVue® Cassettes	

System Computer and Interface Specifications

Interface Specification: Bidirectional protocols for a Laboratory Information System (LIS).

Remote Review Capable: An external computer on the laboratory's network where Authorized personnel on an external computer can review results.

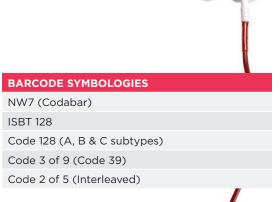
LIS Specifications

LIS interface via one of three user configurable physical interfaces:

- 1. ASTM over RS-232
- 2. ASTM over TCP/IP
- 3. Network shared folders (similar to ORTHO® AutoVue® Innova System)

ASTM protocol is configurable to one of three options:

- 1. Basic ASTM (no 'M' record)
- 2. Enhanced ASTM (very similar/backward compatible to AutoVue Innova)
- 3. Vision ASTM which adds in addition to Enhanced ASTM:
 - a. Error upload message if the order could not be processed.
 - b. The LIS can download multi-tube orders.
 - c. The LIS can send QC orders that specify the cassette/reagent lots to use as well as the expected results.



Communication Ports

I/O ports include:

- 1 DB-9 serial port (RS-232 port for LIS support)
- 1 RJ45 LAN port supports port speeds of automatic, 10/100 Mbps with half and full duplex, and 1 GB full duplex and automatic detection of duplex.
- 5 V 2.0/V 1.1 USB ports are available for:
 - Printer
 - Handheld barcode reader
 - Other devices

Printer Specifications

ORTHO VISION™ Analyzer can be connected either to a network printer or to a local printer.

To schedule an evaluation, please contact your local representative who will arrange a time convenient for your schedule.

