



ideal.

The ideal match for
your lab's testing demands.

The ORTHO VISION™ Analyzer
Technical Specifications



Intended Use

ORTHO VISION™ Analyzer automates *in vitro* Immunohematology testing of human blood utilizing ID-MTS™ Gel card technology.

ORTHO VISION™ Analyzer:

- Automates test processing functions including liquid pipetting, reagent handling, incubation, centrifugation, reaction grading and interpretation and data management requirements using ID-MTS™ Gel cards and digital image processing.
- Standalone instrument or interfaced to the Laboratory Information System (LIS).
- Provides critical process monitoring and management of system maintenance and quality control.

Installation and Site Specifications

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

Physical Dimensions

ORTHO VISION™ Analyzer

Width: 107.4 cm (42.3 in.)

Depth: 77 cm (30.31 in.)

Height: 88.9 cm (35 in.)

Height with maintenance door open: 137 cm (54 in.)

ORTHO VISION™ Table Dimensions (highly recommended)

Table without shelf:

121.9 cm (48 in.) x 76.2 cm (30 in.) x 76.2 cm (30 in.)

Table with shelf at the front:

121.9 cm (48 in.) x 106.7 cm (42 in.) x 76.2 cm (30 in.)

- Occupies 61 cm (24 in.) on left side front of table width

Table with the shelf on the side:

152.4 cm (60 in.) x 76.2 cm (30 in.) x 76.2 cm (30 in.)

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

Weights

ORTHO VISION™ Analyzer: 190 kg (419 lbs)

ORTHO VISION™ Table: 120.2 kg (265 lbs)

Power Requirements

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

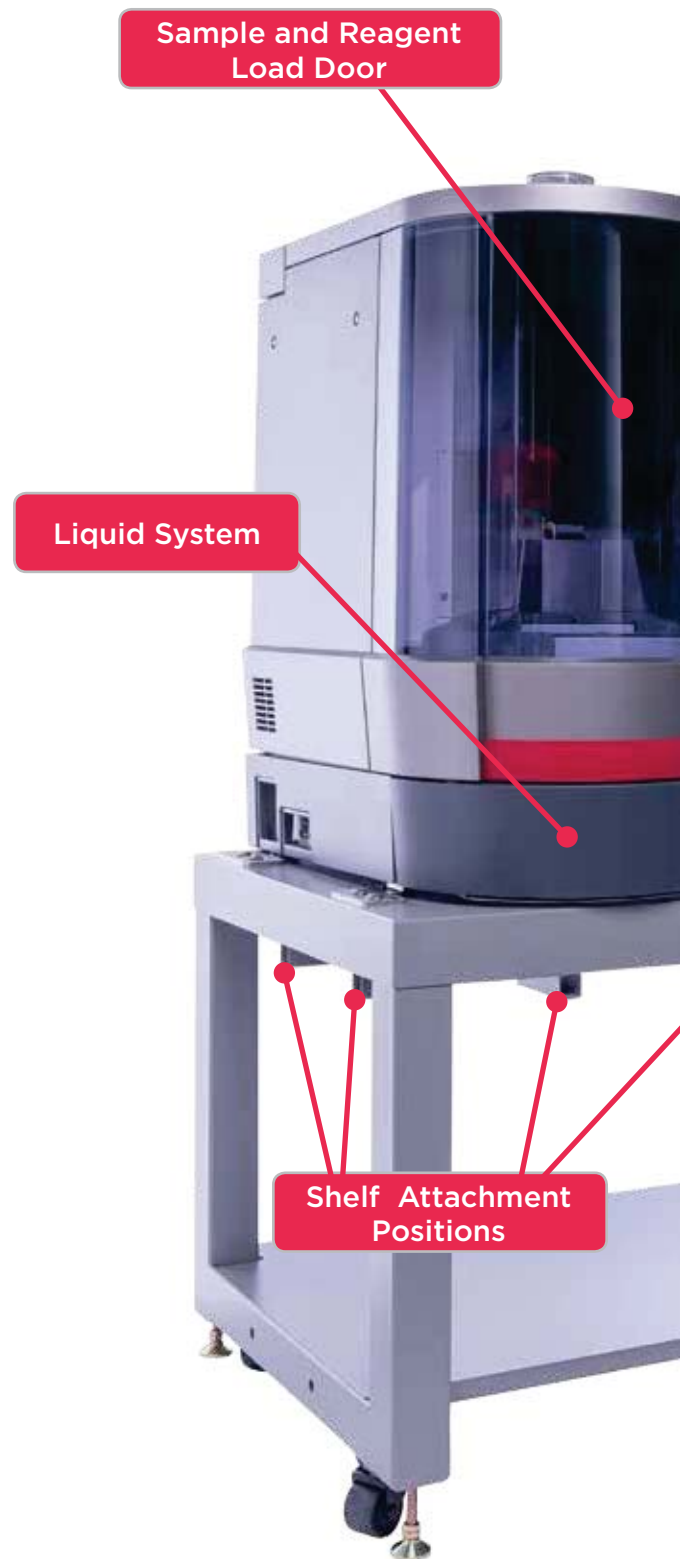
Input Voltage 100 - 240 V AC 50/60 Hz 1000 VA

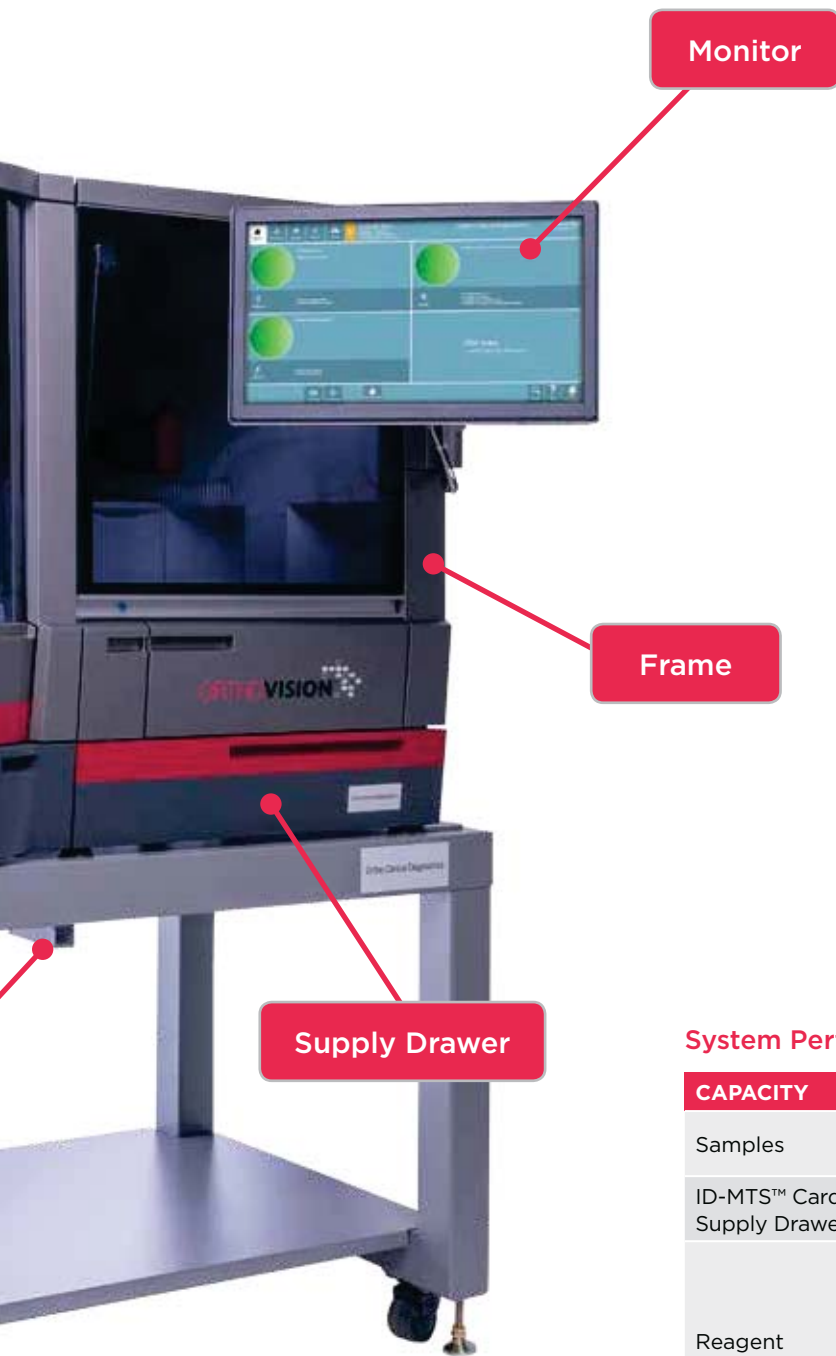
e-Connectivity® Ready

- Network Connection
- Broadband internet

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: 3412 BTU/hr





Supported Sample Types

- Centrifuged whole blood
- Plasma and Serum
- Packed red blood cells

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 47 mm
- 15 x 92 mm Sarstedt 01.1605.100
- 13 x 90 mm Sarstedt 04.1931.100
- 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

System Performance Specifications

CAPACITY	
Samples	Up to 42 samples can be loaded, 6 Sample Racks holding 7 tubes each.
ID-MTS™ Card Supply Drawer	120 ID-MTS™ Cards (6 sleeves of 20)
Reagent Red Blood Cell Supply	3 mL - 33 vials 10 mL - 18 vials Any combination of 3 racks can be used to accommodate Reagent Red Blood Cell (RRBC) testing needs. 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	2 x 100 mL for MTS™ Diluent 2 & MTS™ Diluent 2 Plus 2 x 10 mL for Titer diluent
Heated Incubator	12 ID-MTS™ cards
Room Temperature Incubator	24 ID-MTS™ cards
Centrifuge	2 centrifuges: 10 ID-MTS™ cards per centrifuge
Waste	5.2 litres 80 ID-MTS™ Cards

Sample and Test Performance Characteristics

Column Agglutination Technology using ID-MTS™ Gel Cards

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

SPECIMEN TYPES		
Plasma	Serum	Red Cells

REAGENT TYPES		
ID-MTS™ Gel Cards	Reagent Red Blood Cells	Diluents
Quality Control		

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.

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 folder (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.

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



BARCODE SYBLOGIES
NW7 (Codabar)
ISBT 128
Code 128 (A, B & C subtypes)
Code 3 of 9 (Code 39)
Code 2 of 5 (Interleaved)

Communication Ports

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.
- Line out jacks required for audio cable.

5 V 2.0/V 1.1 USB ports are available:

- Printer
- Handheld barcode reader
- Other devices

Printer Specifications

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