Huvitz Digital Refractor HDR-7000
design and powerful performance show the supremacy of the HDR in satisfying all demands.

Satisfaction, confidence and comfort-
HDR-7000 realizes advanced refraction test with cutting-edge digital technology.
Fulfill more precise exam with various vision tests covering basic to more sophisticated ones.
Luxurious design and intuitive graphic interface meet the highest requirement of aesthetic and functional comfort.

SPECIFICATION

MEASUREMENT RANGE

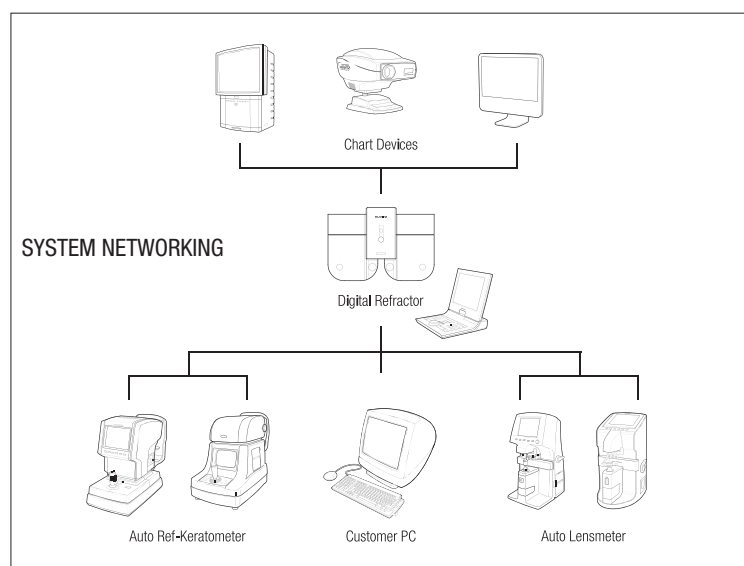|	
Spherical Lense	-29.00~+26.75D (Regular)
	-19.00~+16.75D (Cross Cylinder or Prism Test)
	(0.12D / 0.25D / 0.5D / 1.0D / 2.0D / 3.0D / 4.0D Increments)
Cylinder Lense	0.00~±8.75D (0.25D / 0.5D / 1D / 2D / 3D Increments)
Cylinder Axis	0°~180° (1° / 5° / 15° Increments)
PD	48~80mm (0.5 / 1mm Increments)
	Near PD 50~74mm (Near Working Distance : 35~70cm)
Rotary Prism	0~20△ (0.1△ / 0.2△ / 0.5△ / 1△ / 2△ Increments)
Cross Cylinder	±0.25D / ±0.50D / ±0.25D Dual Cross Cylinder (Split Prism Lens)
Retinoscope	+1.5D, +2.0D (Measurement Distance 67cm, 50cm)

AUXILIARY LENSE

Pin Hole Lense	∅ 2mm
Madox Rod	Right Eye (Red, Horizontal) Left Eye (Red, Vertical)
Red / Green Filter	Right Eye (Red) Left Eye (Green)
Polarizing Filter	Right Eye : 135°, 45° / Left Eye : 45°, 135°
Split Prism	Right Eye : 6△ BU / Left Eye : 10△ BI (up to 5△ Complement)
Fixed Cross Cylinder	±0.50D (Fixed with the axis set at 90°)

DIMENSIONS

Horopter	361(W) x 108(D) x 280(H)mm / 4.74kg
Controller	216(W) x 246(D) x 225(H)mm / 1.89kg (Printer Inclusion)
Junction Box	251(W) x 240(D) x 71(H)mm / 1.88kg
Power Supply	AC 100-120V / AC 200-240V 50 / 60Hz
Power Consumption	145VA

Designs and details can be changed without prior notice for the purposes of improvement.

SYSTEM NETWORKING

Chart Devices

Digital Refractor

Auto Ref+keratometer   Customer PC   Auto Lensmeter

HUVITZ D INNOVATION
Design + Digital Technology

More Beautiful, More Convenient and More Stable -
Huvitz Digital Refractor HDR-7000 introduces the new standard to lead the competition.

Huvitz

Huvitz
Pacing Progress toward People

Slim design with wide viewing angle makes precision even more attainable.
Huvitz's state-of-the-art technology presents sensitive design to attract everyone.

Fast response and accurate exams ensure the utmost reliability in test results.

Dual cross cylinder lens
Dual cross cylinder lens supports fast and convenient astigmatic test.

Automatic occlusion
Automatic occlusion function assists precise and comfortable astigmatic test by preventing accommodation while the lens is rotating over 45 degree or test mode is changing.

Automatic convergence
During presbyopic test or near vision acuity test, automatic convergence function makes an examinee to gaze near vision charts toward the center of refractor lenses assuring precise test.
• Working distance : 35~70cm
• Available Near PD : 50~74mm

Various kinds of near vision chart
Near vision test can be performed better with variously provided near vision charts.

LED Near Sight Illumination and Detachable Near Chart Rod
Built-in LED illumination for the near sight chart automatically recognizes the near or far sight test and turns the lighting on or off to create the best lighting needed for the test environment. Easy installation and removal of the near chart rod with a magnetic joint give you more comfort.

Accurate rotary prism
Precise prism data can be obtained by fine increment (up to 20Δ, minimum 0.1 Δ increment) and automatic occlusion function is working while the prism is changing directions to assist correct test.

Various muscle balance test methods
HDR-7000 provides various muscle balance test methods such as Von Graefe Test, Schober Test, Maddox Rod Test, Polar Cross Test, etc.
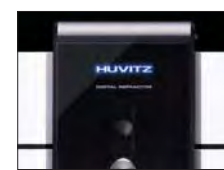
Guide assistance for sophisticated tests
Friendly guides shown on the display panel provide easier processes to perform more sophisticated vision tests such as relative accommodation test or relative convergence test, etc.

Monocular PD adjustment
Many customers have slightly varied monocular PD.
HDR-7000 provides independent PD for right and left eyes.

Forehead rest indicator
A sensor inside of the forehead rest notifies by showing on & off of LED indicator whether an examinee's forehead is rested on the forehead rest to assure the most precise vertex distance.

Fast and silent lens loading
Faster lens loading helps to accommodational interference and fatigue of examinees' eyes.
Silent operation offers more comfort during the exam process.

Illuminated vertex distance check window
More accurate test is guaranteed by positioning examinees' eyes in the correct vertex distance through the illuminated vertex distance check window.

Easy cleanup
The detachable design of the frequently contaminated parts (Forehead Rests, Face Shields, and Lens Windows) helps easier and faster cleanup.

User-friendly touch screen interface, jog dial and switches provide control for various operations.
The swiveling and tilting display can be shown in every direction to make refraction tests more intimate.
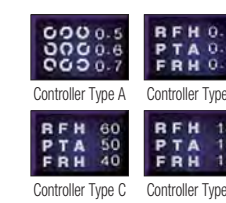Explore the exciting design features.

Enhance exams with various advanced test methods and powerful networking.

Various charts and tests
18 visual acuity test charts, 26 vision test charts, and up to 35 user defined unit test charts support the most advanced eye test process.

Controller Type A Controller Type B
Controller Type C Controller Type D

Global standard chart types
HDR-7000 offers worldwide global standard chart types.

Test process programming
Maximum 10 customized test processes can be programmed and saved with the detailed setting of unit test charts conversion, auxiliary lens inserting, fogging, chart masking, etc.

User-defined test
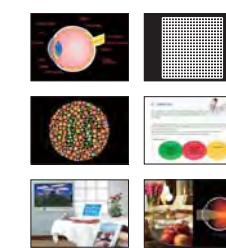Maximum 35 user-defined tests can be edited and stored.

Real time guide
Graphical representation displayed on screen guides test process easier & faster in real time.

Displaying the result in tables and graphics
Test results are shown in tables and graphics help to understand easier and faster.

Various image clips
Color blindness test, Amsler's Grid, and many other kinds of near vision charts are provided for more perfect test.
Various image clips including progressive lens guide, diagram of an eye & refraction, etc. support better understanding for customers.

Tilting & swivel LCD panel
Tilting & swivel LCD panel makes it possible to share the displayed information in any direction or angle.

Touch Screen
Touch screen interface offers intuitive guide with great convenience for operation.

Multi-function Jog Dial
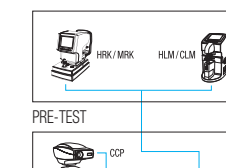Multi-function Jog Dial assists fast and convenient lens loading and execution of programs.

Tact switch
Elegant tact switches are well-organized functionally, and also offer satisfying feeling of touch.
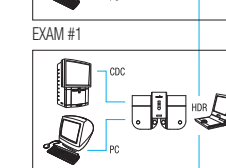
Built-in printer
Built-in printer on the operation panel makes accessing the printer more convenient and replacing paper at one-step process.

Easy installation of various interfaces
Various chart devices (Projector CCP-3100, Dream Chart CDC-4000 & LCD Chart) can be connected in wire / wireless. PC communication connecting interface can be attached to support customer data management. (Option)

Efficient multiple connection of systems
The connection of Auto Ref / Keratometer and Auto Lensmeter is supported.
Especially, only one set of connection of Auto Ref / Keratometer and Auto Lensmeter can be shared to multiple Huvitz Digital Refractor systems, thus allowing maximum cost efficiency. Simultaneous data sharing with the connected systems makes it possible to organize and manage refraction test environment efficiently.

PRE-TEST
EXAM #1
EXAM #N