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| **MINISTRY OF NATIONAL HEALTH SERVICES REGULATIONS & COORDINATION**  **GOVERNMENT OF THE PUNJAB** | LOGO.jpg |
| **PRODUCT VOCABULARY MEDICAL STORE(PVMS) OF OPTHALMOLOGY EQUIPMENT** | *Volume - I , 2021* |

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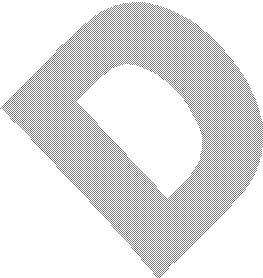
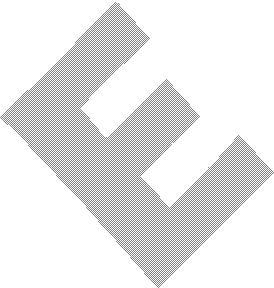
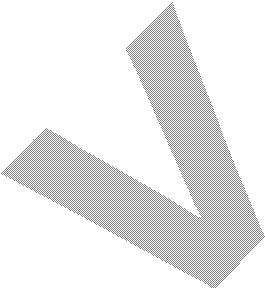
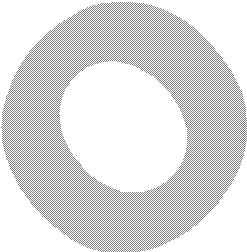
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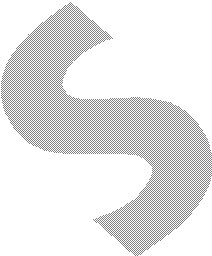
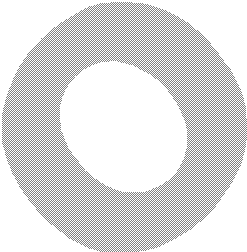
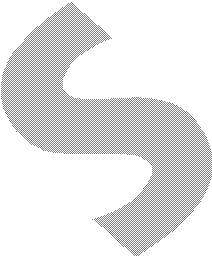
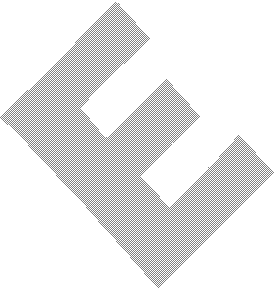
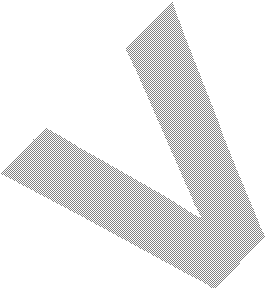
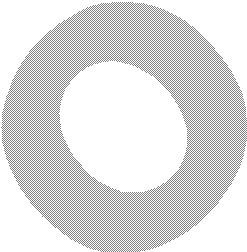
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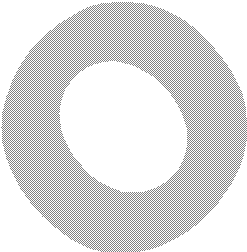
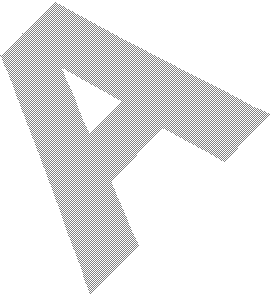
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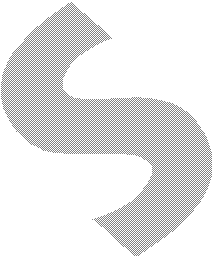
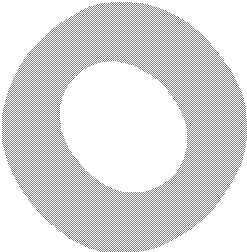
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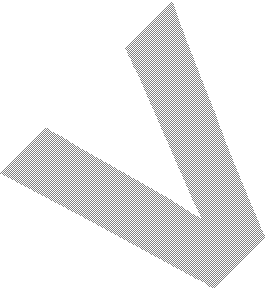
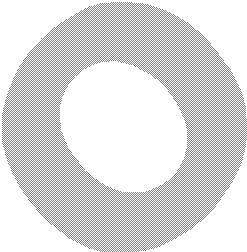
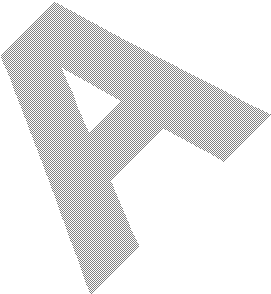
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| Clinical Specialty | Ophthalmology |
| Generic Name | **OPERATING MICROSCOPE (BASIC OPERATING MICROSCOPE WITH**  **STEPPED MAGNIFICATION)** |
| Clinical Purpose | Surgery |
| **TECHNICAL SPECIFICATIONS** | |
| Floor mounted stand, microscope body with  5 step magnification changer (manual or motorized)  Built in coaxial illumination, motorized fine focusing and manual/motorized coarse focusing Objective: f=175 or f=200.  Binocular tube inclined at fixed angle.  Eyepiece 10x or 12.5x with diopteric adjustment. Sterilization protective caps for all drive knobs.  Illumination with controllable intensity with halogen or LED. With or without fiber optics.  Water proof foot control pannel Upgradable with accessories. | |
| **ACCESSORIES:**  Six spare halogen bulbs (in case of halogen illumination). Dust cover | |



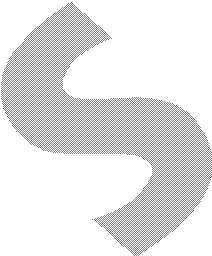
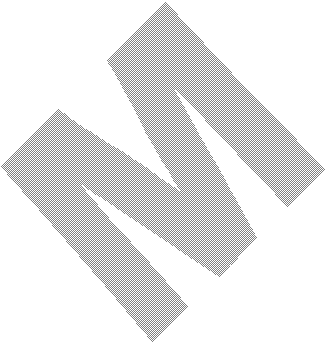
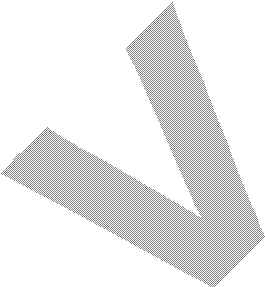
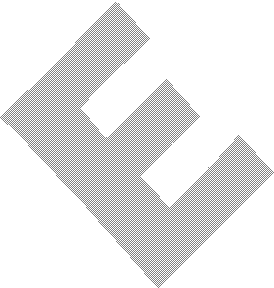
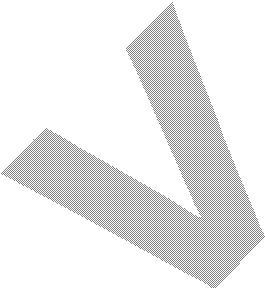
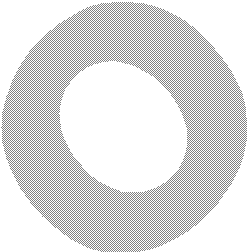
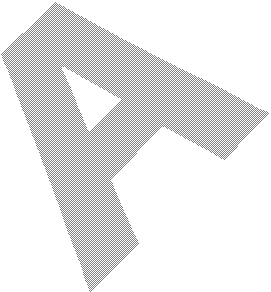
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| Clinical Specialty | Ophthalmology |
| Generic Name | **OPERATING MICROSCOPE (BASIC OPERATING MICROSCOPE WITH**  **ZOOM)** |
| Clinical Purpose | Surgery |
| **TECHNICAL SPECIFICATIONS** | |
| Floor stand mount microscope body with zoom (ratio 1:5 or better). Linear/Continuous zooming  XY coupling  Builtin coaxial illumination with red reflex.  Motorized fine focusing and manual or motorized coarse focusing Objective f=175mm/ f=200 mm  Binocular tube: inclined at a fixed angle Eyepiece: 10 X or 12.5X with dioptric adjustment  Halogen/LED illumination with controllable intensity with/without fiber optic cable Water proof foot control panel.  Sterilizeable protective caps for all drive knobs | |
| **ACCESSORIES:**  06 spare halogen lamps (in case of halogen illumination). Dust cover. | |



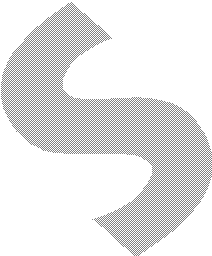
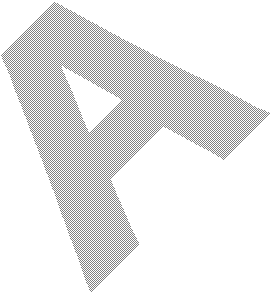
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| Clinical Specialty | Ophthalmology |
| Generic Name | **OPERATING MICROSCOPE (TEACHING OPERATING MICROSCOPE)** |
| Clinical Purpose | Surgery |
| **TECHNICAL SPECIFICATIONS** | |
| Floor mounted stand, microscopic body with linear motorized zoom (1:5 or better),  Built in coaxial illumination, motorized fine focusing, coarse focusing (Manual or Motorized). Objective: f=200.  Motorized XY coupling.  Binocular tube inclinable at various angles Eyepiece: 10x or 12.5x with dioptric adjustment.  Fully apochromatically corrected optics with high light transmission. Sterilization protective caps for all drive knob 03 sets.  Halogen illumination with controllable intensity / Light Emitting Diode, with or without fiber optic cable.  Water proof foot control panel. Up gradable with accessories.  Adjustable speed for focus, zoom and XY.  Binocular stereoscopic assistant’s attachment with inclination  CCTV attachment including adapter, 3 CCD or CMOS Camera with beam splitter. Digital recording system/USB recording with hard drive.  20” or better LCD or LED monitor (In case of Medical grade) / 30” or better LCD or LED monitor (In case of non medical grade) (i.e to specify).  Retinal vision system with attachment. Including (120o, 90o, and Macular lens) | |
| **ACCESSORIES:**  Dust cover.  06 spare bulbs (in case of halogen illumination). | |



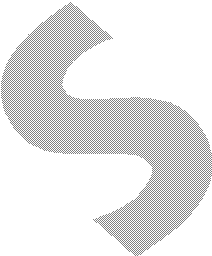
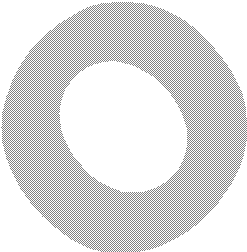
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| Clinical Specialty | Ophthalmology |
| Generic Name | **OPERATING MICROSCOPE (TEACHING OPERATING MICROSCOPE**  **WITH ELECTORMAGNETIC BRAKES)** |
| Clinical Purpose | Surgery |
| **TECHNICAL SPECIFICATIONS** | |
| Floor mounted stand, microscopic body with linear motorized zoom (1:5 or better),  Built in coaxial illumination, motorized fine focusing, coarse focusing (Manual or Motorized). Electromagnetic brakes  Objective: f=200. Motorized XY coupling.  Binocular tube inclinable at various angles Eyepiece: 10x or 12.5x with dioptric adjustment.  Fully apochromatically corrected optics with high light transmission. Sterilization protective caps for all drive knob 03 sets.  Halogen illumination with controllable intensity / Light Emitting Diode, with or without fiber optic cable.  Water proof foot control panel. Up gradable with accessories.  Adjustable speed for focus, zoom and XY.  Binocular stereoscopic assistant’s attachment with inclination  CCTV attachment including adapter, 3 CCD or CMOS Camera with or withour beam splitter. Digital recording system/USB recording with hard drive.  20” or better LCD or LED monitor (In case of Medical grade) / 30” or better LCD or LED monitor (In case of non medical grade) (i.e to specify).  Retinal vision system with attachment. Including (120o, 90o, and Macular lens) | |
| **ACCESSORIES:**  Dust cover.  06 spare bulbs (in case of halogen illumination). | |



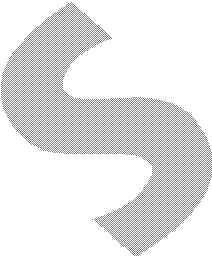
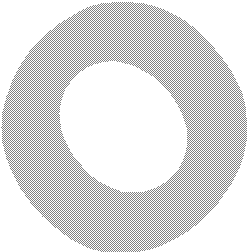
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| Clinical Specialty | Ophthalmology |
| Generic Name | **CORNEAL ANTERIOR AND POSTERIOR TOPOGRAPHY SYSTEM** |
| Clinical Purpose | Diagnostic for corneal diseases |
| **TECHNICAL SPECIFICATIONS** | |
| Topographical keratoconus detection  Topography and elevation maps of the anterior and posterior corneal surface Pachymetry maps.  Refractive maps  Iris image and horizontal white to white measurement Comparison and differential analysis.  Scheimpflug/Slit scan/placido based  Computer system originally supplied by manufacturer | |
| **ACCESSORIES:**  Color Laser printer with one extra toner set  With original motorized table/Imported from Europe/Japan/USA. | |



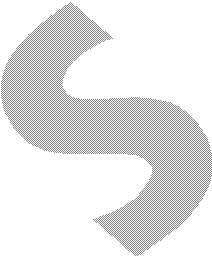
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| Clinical Specialty | Ophthalmology |
| Generic Name | **OPTICAL COHERENCE TOMOGRAPHY (OCT)** |
| Clinical Purpose | Diagnostic. Retinal diseases |
| **TECHNICAL SPECIFICATIONS** | |
| Scan modes : Confocal/LSO /SLO/ live OCT fundus / fundus image/swept source Scan speed : Min 27,000 A-Scan / sec or more  Including Optic Nerve Head Analysis, Macula Anterior Segment : With Anterior Segment Module Computer : Originally Supplied by the manufacturer. | |
| **ACCESSORIES:**  Color laser printer with one extra toner set  With original motorized table/Imported from Europe/Japan/USA. | |



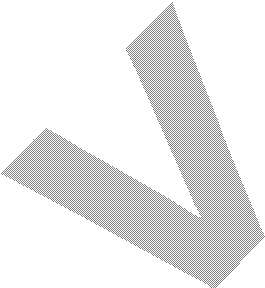
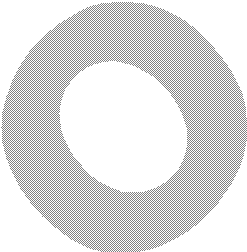
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| Clinical Specialty | Ophthalmology |
| Generic Name | **A&B SCAN WITH BIOMETRY** |
| Clinical Purpose | Diagnostic. Retinal diseases and intraocular lens power calculation |
| **TECHNICAL SPECIFICATIONS** | |
| Digital Memory and image freezing.  A&B modes with control vector and biometric ruler with computer to calculate IOL power. LCD /TFT monitor alphanumeric or analog display of overall gain.  Near field and dynamic setting.  Depth of examination 40mm & 60mm. In B mode scanning angle 40o or more. 10 MHz or better B Probe.  10 MHz or better biometry probe. | |
| **ACCESSORIES:**  With compatible laser printer and one extra toner. | |



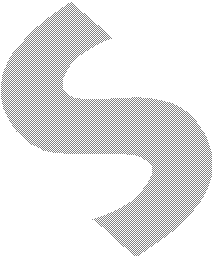
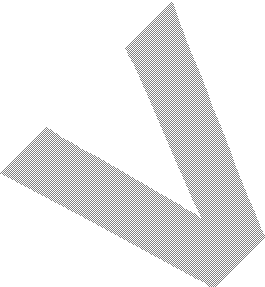
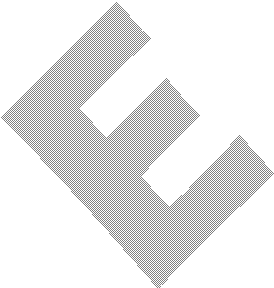
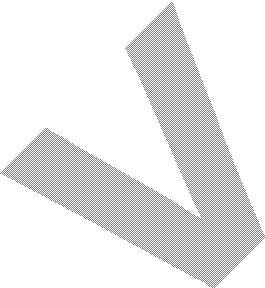
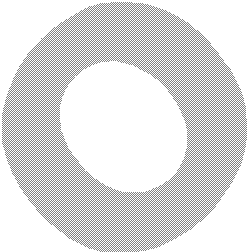
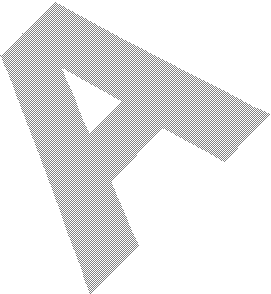
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| Clinical Specialty | Ophthalmology |
| Generic Name | **B SCAN** |
| Clinical Purpose | Diagnostic. Retinal diseases |
| **TECHNICAL SPECIFICATIONS** | |
| Digital Memory and image freezing.  LCD /TFT monitor alphanumeric or analog display of overall gain. Near field and dynamic setting.  Depth of examination 40mm & 60mm. In B mode scanning angle 40o or more. 10 MHz or better B Probe.  Gray scale 256 or better. | |
| **ACCESSORIES:**  With compatible laser printer. | |



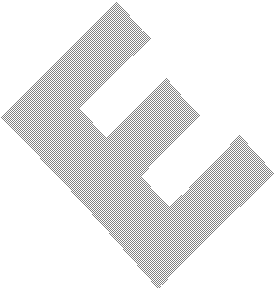
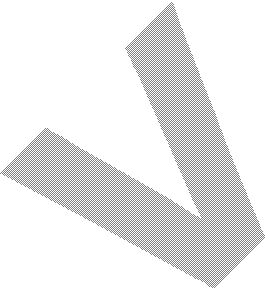
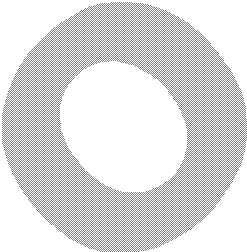
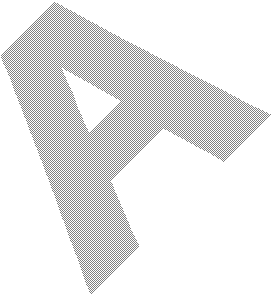
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| Clinical Specialty | Ophthalmology |
| Generic Name | **BIOMETER (A-SCAN)** |
| Clinical Purpose | Diagnostic for IOL power calculation |
| **TECHNICAL SPECIFICATIONS** | |
| Ultrasonic bio-meter for manual or automatic freezing system via foot pedal when valid measurement is detected.  Measurement of axial length, ACD and lens thickness, features measurement of 5 or more reading with adjustable gates.  Standard deviation of multiple scans, fully digitized display of real time echograms. Solid probe with fixation light.  Audio feedback for probe alignment. With standard formulae. | |
| **ACCESSORIES:**  Compatible laser printer for all data. | |



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| Clinical Specialty | Ophthalmology |
| Generic Name | **OPHTHALMIC DIODE PUMPED SOLID STATE WITH ENDO LASER**  **TECHNOLOGY** |
| Clinical Purpose | Therapeutic. Retinal treatment |
| **TECHNICAL SPECIFICATIONS** | |
| Ophthalmic Diode Pumped Solid State Frequency Doubled LASER Photocoagulation with 532nm output.  Wave length: 532nm Diode Pumped Frequency Doubled Solid State. Power at tissue up to: 1W or better.  Pulse Duration: 0.05sec to 1sec or better. Repeat interval: 3 interval selection or better. Cooling: Thermoelectric / Air cooled.  With foot switch.  Slit lamp adaptation with spot size 50 to 500 µm (par focal range) or better. Standard halogen slit lamp on original stand.  Standard filter and Micromanipulator.  LASER application lenses (One for Macular grid, one Standard PRP and one wide field PRP) | |
| **ACCESSORIES:**  Standard Accessories  With original motorized table/Imported from Europe/Japan/USA. | |
| **OPTIONAL:**  Indirect ophthalmoscope laser delivery system  Endolaser probes gauge and quantity to be decided by end user | |

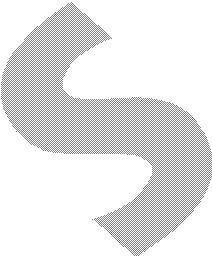
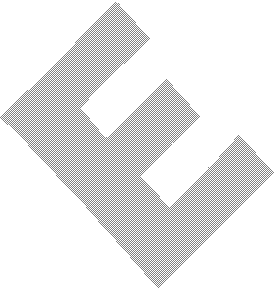
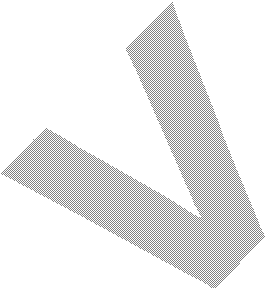
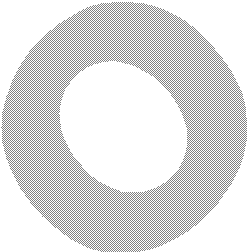
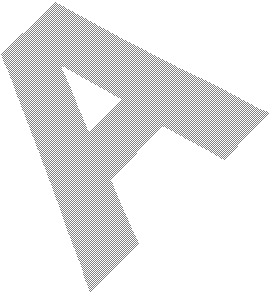


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| Clinical Specialty | Ophthalmology |
| Generic Name | **DIODE LASER** |
| Clinical Purpose | Therapeutic. |
| **TECHNICAL SPECIFICATIONS** | |
| Consisting of main console with power supply. Treatment wavelength : 805 / 810nm  Power : 1W or better Aiming beam: adjustable Spot size : Variable  Pulse duration : 0.01 sec. to 0.5 sec. Cooling : Air  Foot switch.  With standard accessories including Cyclophotocoagulation probe/ (G probe). | |
| **ACCESSORIES:**  With original motorized table/Imported from Europe/Japan/USA. | |
| **OPTIONAL:**  Endolaser probes gauge and quantity to be specified by enduser. | |

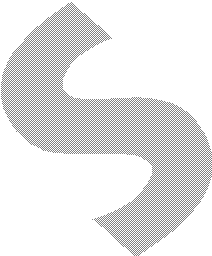
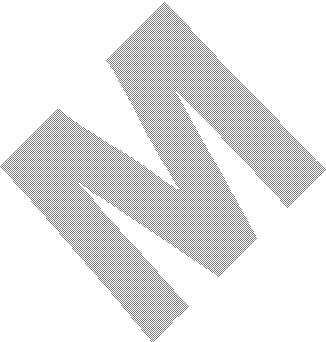
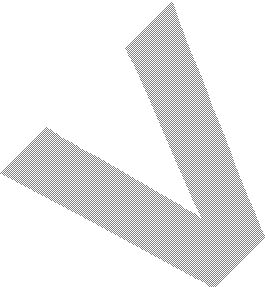
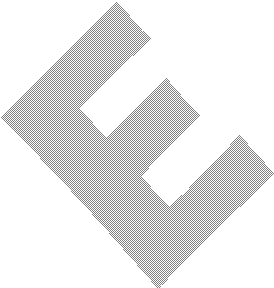
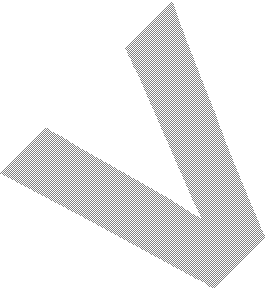


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| Clinical Specialty | Ophthalmology |
| Generic Name | **OPHTHALMIC YAG LASER** |
| Clinical Purpose | Therapeutic |
| **TECHNICAL SPECIFICATIONS** | |
| Q-Switch Nd- YAG Laser. Solid state  Laser Wave length: 1064nm. Laser power: 8-10 mJ  Pulsed Length: 2 to 4 nsec. Aiming Beam: He Ne / Diode. Cooling : Air  Spot size: Less then 20 microns Power: 220V, 50 Hz. | |
| **ACCESSORIES:**  With original motorized table/Imported from Europe/Japan/USA. | |

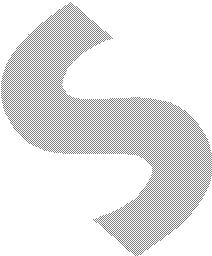
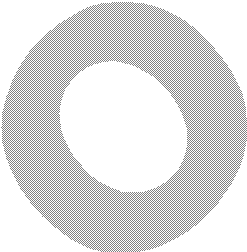
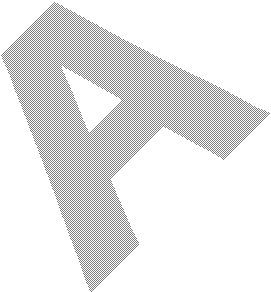
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| Clinical Specialty | Ophthalmology |
| Generic Name | **OPHTHALMIC MULTI-SPOT SOLID STATE PHOTOCOAGULATOR**  **(PATTERN LASER)** |
| Clinical Purpose | Therapeutic, Retinal treatment |
| **TECHNICAL SPECIFICATIONS** | |
| Wave length: 532nm/577nm  Power at tissue up to: 1 W or better. Pulse Duration: 0.1 sec to 1sec or better Cooling: Thermoelectric / Air cooled With foot switch  Spot size: 100 to 400 µm or better Single spot mode: single, repeat  Patterns: Square, circle, arc, line, single spot Standard slit lamp on original stand.  Standard filter  Laser application lenses – One macular grid, One standard PRP and one wide field lens | |
| **ACCESSORIES:**  With original motorized table/Imported from Europe/Japan/USA. | |
| **OPTIONAL:**  Endoprobe  Indirect laser delivery system | |



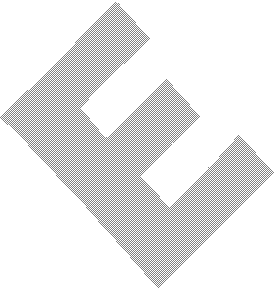
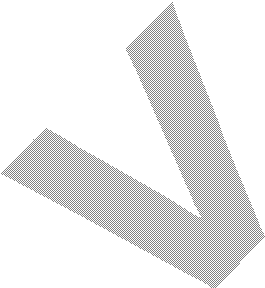
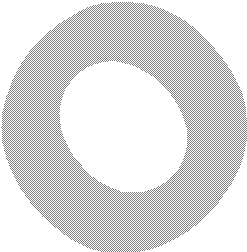
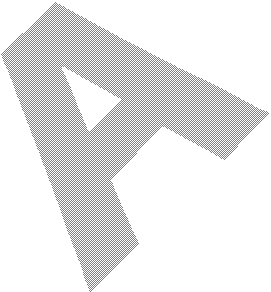
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| Clinical Specialty | Ophthalmology |
| Generic Name | **DIGITAL FUNDUS CAMERA (VARIABLE ANGLE) (DIGITAL RETINAL**  **IMAGING SYSTEM)** |
| Clinical Purpose | Diagnostic. Retina |
| **TECHNICAL SPECIFICATIONS** | |
| Digital Fundus Camera (variable Angle) Variable Angle: Max 50o or better.  Focusing System: Fine focusing and Coarse focusing. Tilting Facility provided both horizontal and vertical. Optimum working distance: 35 mm onward.  Provided with range of examiner’s dioptric compensation.  Facility provided for fundus fluorescein angiography along with set of two standard filters. Light source for observation: Halogen Lamp and for flash Xenon bulb.  Flash intensity: 300W or better.  Fixation light and internal fixation target Power: 220V, 50Hz AC. | |
| **ACCESSORIES:**  Compatible Printer.  With original motorized table/Imported from Europe/Japan/USA. | |



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| Clinical Specialty | Ophthalmology |
| Generic Name | **AUTOMATED PERIMETER / VISUAL FIELD ANALYZER** |
| Clinical Purpose | Diagnostic. Optic nerve diseases/Neurological diseases |
| **TECHNICAL SPECIFICATIONS** | |
| Perimeter able to perform detailed examination of visual field from screening to threshold testing.  Multi stage software program.  Accurate examination with central 80o or better. Program: Screening test, threshold and macula.  Constant patient monitoring through CCD / CMOS camera.  Defect level indicator inform the examiner the status of the field of vision with every stimulus. Direct projection optics technology with variable stimulus intensity and size as per Goldman standard.  Comprehensive printout facility through conventional compatible printer.  Descriptive report provided with clear statistical assessment of the field data Mounted on height adjustable motorized table (original).  Complete system upgradeable to computer patient data management system and possibility of software up gradation. | |
| **ACCESSORIES:**  With original motorized table/Imported from Europe/Japan/USA. | |



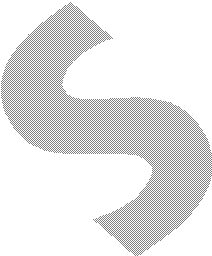
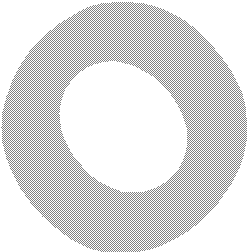
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| Clinical Specialty | Ophthalmology |
| Generic Name | **OPHTHALMIC PHACOEMULSIFICATION UNIT** |
| Clinical Purpose | Therapeutic. Cataract surgery |
| **TECHNICAL SPECIFICATIONS** | |
| Main console with surgeon setting programming. Phaco modulation choice of pulse and burst mode. Vacumm 0-500 mmHg or better  Provision for 2.2 & 2.8 mm tips. Programmable foot pedal.  Peristaltic pump.  Irrigation/ Aspiration and phaco emulsification hand pieces I/A collection cassette or bag (Quantity 3)  I/A test chamber (Quantity3) Irrigation sleeves (Quantity3)  Phaco needle 30 deg bevel round (Quantity 3) and Bend tip (Quantity 3). Reusable anterior vitrectomy cutter (Quantity3)  Phaco hand piece ( Quantity 2) metal luer lock with sterilization box . | |
| **ACCESSORIES:**  With Original trolley Dust cover | |



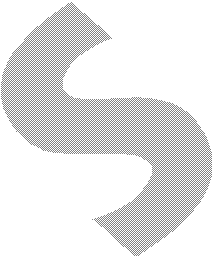
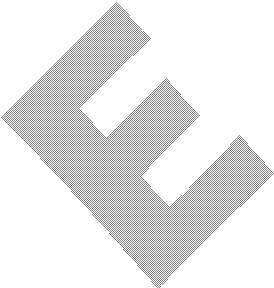
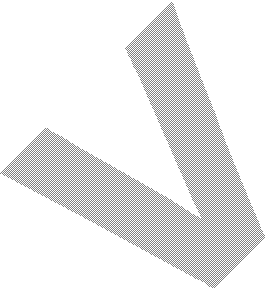
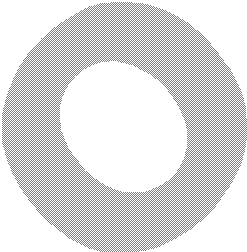
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| Clinical Specialty | Ophthalmology |
| Generic Name | **POSTERIOR VITRECTOMY UNIT (VENTURI)** |
| Clinical Purpose | Surgery. Retina. |
| **TECHNICAL SPECIFICATIONS** | |
| Vitrectomy cutter type: Pneumatically Driven 20G, 23G, 25G/27G Compatibility disposable or auto clavable  Cutting Rate: Range Min 4000 cuts per minute or better. Actuating Medium: Pressurized Air from external source. Control: Dual linear system foot switch & screen.  Diathermy: Bipolar 20G, 23G, 25G/27G compatibility. (Auto clavable or Disposable).  Fluidics: Vacuum up to 500mmhg or better. Cassette: Disposable.  Tubing set: Auto-clavable /Disposable Pump Type: Venturi and Peristaltic Scissors & Forceps: Compatible.  Start up Accessories Kit.  Illumination type: Min two independent light sources or converter compatible. Illumination bulb type: Xenon or LED.  Tamponande: Oil injection module, extraction module, air tamponade Phaco Emulsification Hand piece 4 crystal or better. (Quantity 2) Fragmatome: Intravitreal fragmentation compatible.  With original trolley and motorized bottle height control. Electric power: 200 – 240V, 50Hz AC, | |
| **ACCESSORIES:**  Pneumatic or motor driven guillotine cutter reusable Tubing set.  Bipolar cable, Bipolar forceps, Bipolar eraser, Endo diathermy probe. Infusion cannula 2.5mm, 4.0mm, 6.0mm  Extrusion hand piece 20G,23, 25/27 G Micro vitrectomy scissors.  Micro vitrectomy forceps. Sclera plugs 20G, 23 Sclera plug forceps.  Posterior vitrectomy cutters 20G, 23, 25/27 G Tubing set for fluid-gas exchange  Original instrument stand | |



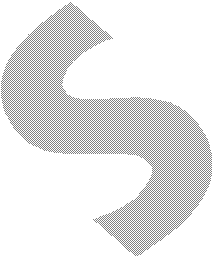
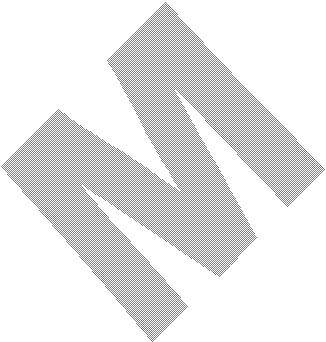
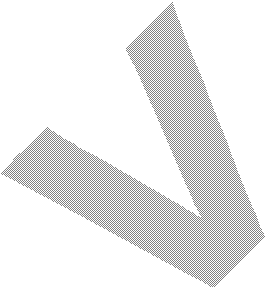
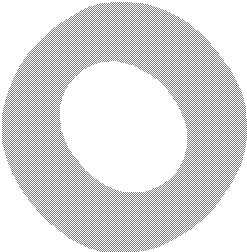
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| Clinical Specialty | Ophthalmology |
| Generic Name | **SLIT LAMP BIOMICROSCOPE WITH DIGITAL IMAGING SYSTEM** |
| Clinical Purpose | Diagnostic for examination of the eye and teaching of students  simultaneously. |
| **TECHNICAL SPECIFICATIONS** | |
| Binocular tube with vertical type eye width adjustment. Illumination LED or Halogen.  Eyepieces with dioptric adjustment 10X to 16X any one pair. Magnification range variable from 10x to 35x (5 steps or zoom). Slit length: variable.  Tilt mechanism: 20o or better. Slit image rotation: 0 to 180o. Filters: Standard filters  With hanging type applanation tonometer. with extra prism and calibration kit Including original digital camera with adapter.  PC for reporting: Core i5, 4GB RAM, 1TB hard disk or better, USB port. 19’ LCD Chin-rest papers. | |
| **ACCESSORIES:**  With original motorized table/Imported from Europe/Japan/USA. Dust cover  Chin rest papers Breath shield  With extra 12 lamp only for Halogen illumination Slit lamp. | |



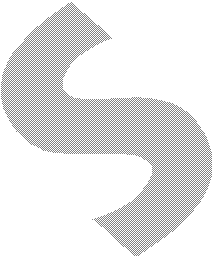
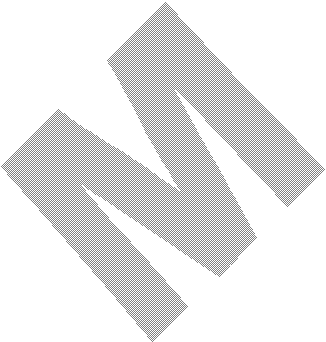
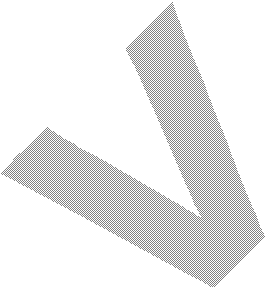
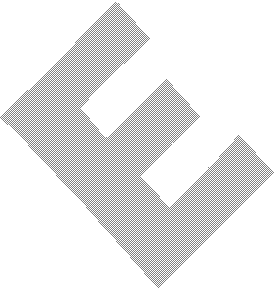
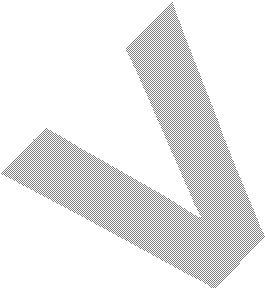
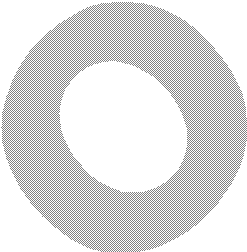
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| Clinical Specialty | Ophthalmology |
| Generic Name | **SLIT LAMP BIOMICROSCOPE** |
| Clinical Purpose | Diagnostic/Examination of Eye |
| **TECHNICAL SPECIFICATIONS** | |
| Binocular tube with vertical type and eye width adjustment. Illumination LED or Halogen.  Eyepieces with dioptric adjustment 10x. Slit length: variable.  Tilt mechanism.  Slit image rotation: 0 to 180o. Filters: Standard.  With hanging type applanation tonometer with one extra prism and calibration kit. | |
| **ACCESSORIES:**  With original motorized table/Imported from Europe/Japan/USA. Dust cover.  Plastic breath-shield. Chin-rest papers.  With extra 12 lamp only for halogen illumination Slit Lamp. | |



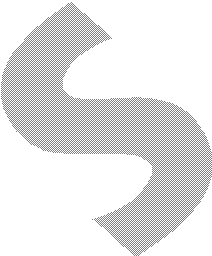
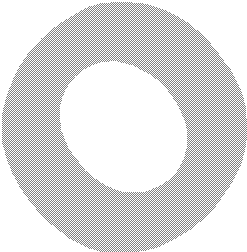
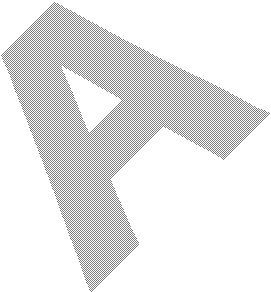
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| Clinical Specialty | Ophthalmology |
| Generic Name | **APPLANATION TONOMETER** |
| Clinical Purpose | Diagnostic/Examination of Eye |
| **TECHNICAL SPECIFICATIONS** | |
| Hanging type / Goldman type.  With one extra prism, with calibration kit. | |



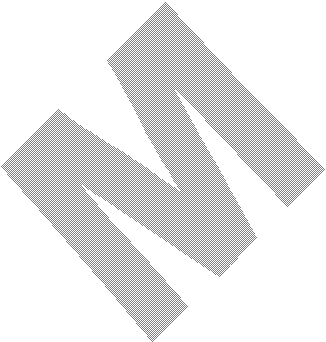
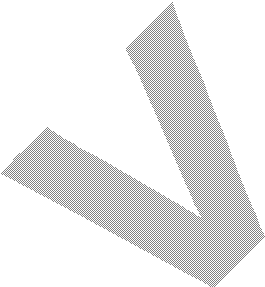
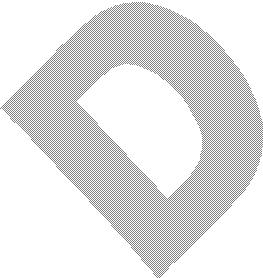
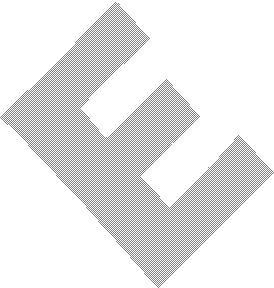
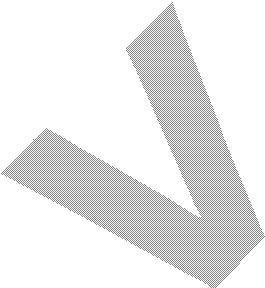
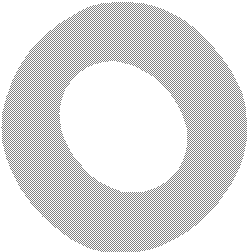
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| Clinical Specialty | Ophthalmology |
| Generic Name | **OPHTHALMOSCOPE & RETINOSCOPE SET** |
| Clinical Purpose | Diagnostic/Examination of Eye |
| **TECHNICAL SPECIFICATIONS** | |
| Standard illumination, aperture dial contains small aperture, standard aperture, concentric scale and slit aperture.  Corrective power range: +20 to -30D or better.  Control for streak width and streak rotation, streak revolves 360o. Head rest to prevent operator’s spectacles from getting scratched.  Separate handles with rechargeable batteries for Retinoscope & ophthalmoscope. Rechargeable handles with dual desk charger/wall mounted. | |
| **ACCESSORIES:**  3 spare bulbs for Ophthalmoscope. 3 spare bulbs for Retinoscope.  Carrying case | |



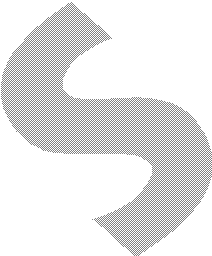
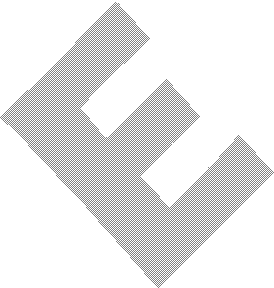
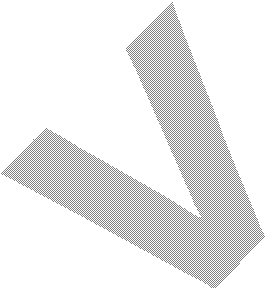
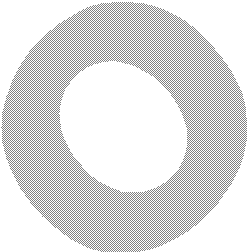
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| Clinical Specialty | Ophthalmology |
| Generic Name | **OPHTHALMOSCOPE** |
| Clinical Purpose | Diagnostic/Examination of Eye |
| **TECHNICAL SPECIFICATIONS** | |
| Standard illumination, aperture dial contains small aperture, standard aperture, concentric scale and slit aperture.  Corrective power range: +20 to -30D or better | |
| **ACCESSORIES:**  Rechargeable handle with charger & batteries. 3 spare bulbs.  Carrying case | |



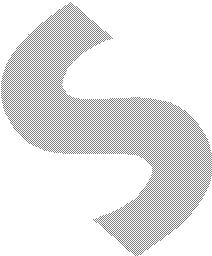
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| Clinical Specialty | Ophthalmology |
| Generic Name | **RETINOSCOPE** |
| Clinical Purpose | Diagnostic. To determine the refractive status of the eye. |
| **TECHNICAL SPECIFICATIONS** | |
| Standard illumination,  Control for streak width and streak rotation, streak revolves 360o. Head rest to prevent operator’s spectacles from getting scratched. | |
| **ACCESSORIES:**  3 spare bulbs.  Carrying case  Rechargeable handle with charger & batteries. | |



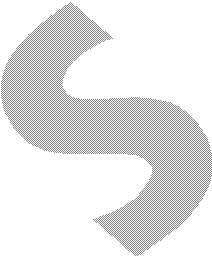
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| Clinical Specialty | Ophthalmology |
| Generic Name | **REFRACTION BOX / TRIAL LENS SET** |
| Clinical Purpose | Diagnostic. To determine the refractive status of the eye. |
| **TECHNICAL SPECIFICATIONS** | |
| Sphere: ±012D to ±20.00D. Cylinder : ±012D to ±6.00D. Prisms: 1 to 10D  With unbreakable light weight anodized aluminum / Plastic mounts and standard accessories in carrying case. | |

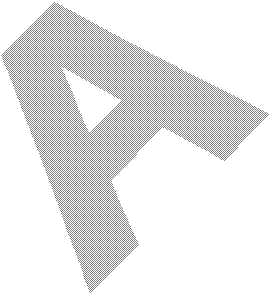


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| Clinical Specialty | Ophthalmology |
| Generic Name | **UNIVERSAL TRIAL FRAME** |
| Clinical Purpose | Diagnostic. To determine the refractive status of the eye. |
| **TECHNICAL SPECIFICATIONS** | |
| Universal trial frame. | |

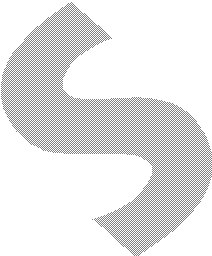
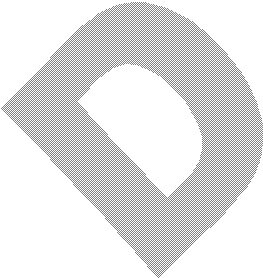
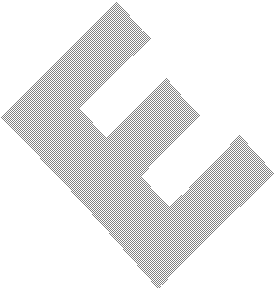
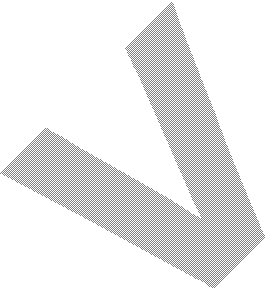
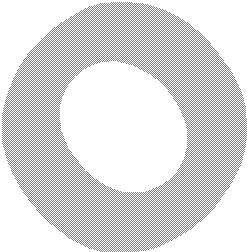


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| Clinical Specialty | Ophthalmology |
| Generic Name | **FOCIMETER / LENSOMETER (MANUAL)** |
| Clinical Purpose | Diagnostic. To determine the power of lenses. |
| **TECHNICAL SPECIFICATIONS** | |
| Type: ocular internal reading with eye piece. Target : Pinhole corona.  Vertex power range: 0 to ±25D. Steps : 0.25D or better.  Cylinder axis : 0 to 180o . Prismatic power range : 5 prism D.  Electricity: 220V, 50Hz AC, or battery operated. | |
| **ACCESSORIES:**  With one spare bulb (only for halogen illumination). | |

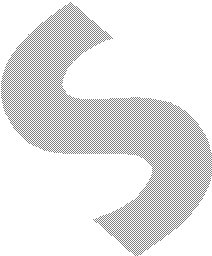
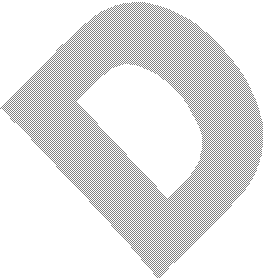
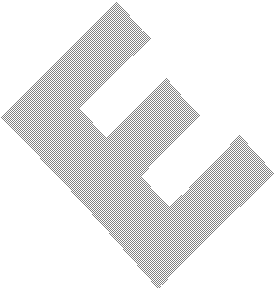
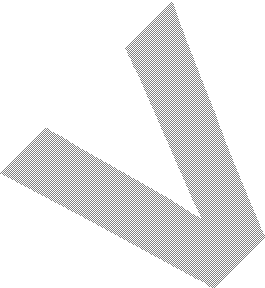
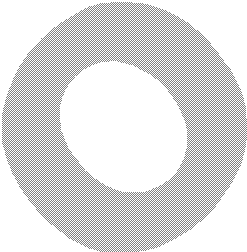




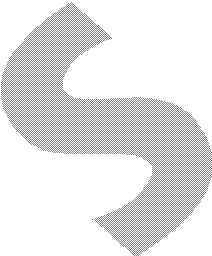
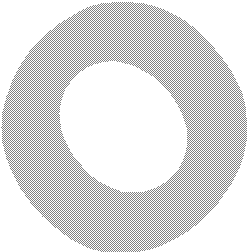
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| Clinical Specialty | Ophthalmology |
| Generic Name | **JACKSON CROSS CYLINDER** |
| Clinical Purpose | Diagnostic/Examination of Eye |
| **TECHNICAL SPECIFICATIONS** | |
| ±0.5 & ± 0.25D (pair) | |



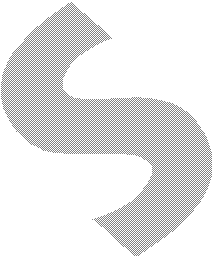
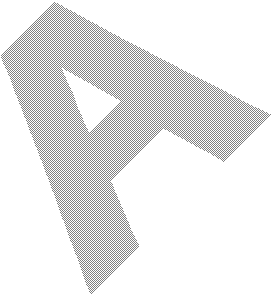
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| Clinical Specialty | Ophthalmology |
| Generic Name | **INDIRECT OPHTHALMOSCOPE** |
| Clinical Purpose | Diagnostic/Examination of retina. |
| **TECHNICAL SPECIFICATIONS** | |
| Head mounted (adjustable). Illumination LED or Halogen. Pupillary distance & size adjustable.  Output voltage: variable voltage power supply.  Filters: Red free, Cobalt blue, Teaching mirror. Scleral depressor, detachment chart and carrying case. | |
| **ACCESSORIES:**  With 06 spare bulbs only for halogen illumination ophthalmoscope. 20 D lens and 28 D lens | |
| **OPTIONAL:**  Cordless | |



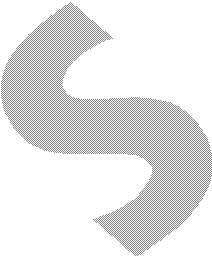
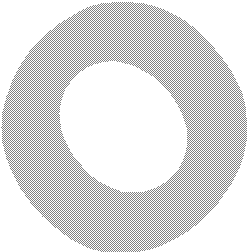
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| Clinical Specialty | Ophthalmology |
| Generic Name | **AUTO REFRACTOMETER WITH KERATOMETER** |
| Clinical Purpose | Diagnostic. To determine the refractive status of the eye and power  of cornea. |
| **TECHNICAL SPECIFICATIONS** | |
| With auto measurement & printout with standard accessories. Manual or motorized chin rest movement.  Measuring range:  Spherical: ±17D or better. Cylinder: ±6 D or better. Axis: 1 to 180o.  Pupil distance: Max 85mm (increment 1mm). Display: digital on TV or LCD monitor with printer. Electric power: 220-240V AC, 50Hz. | |
| **ACCESSORIES:**  With 6 paper roll, dust cover and cleaning kit. On locally made motorized table. | |



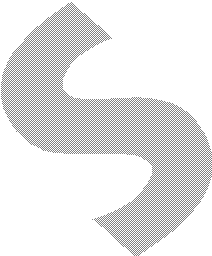
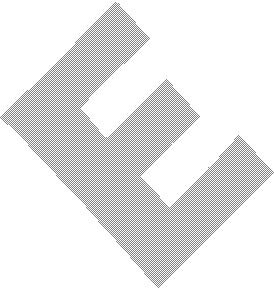
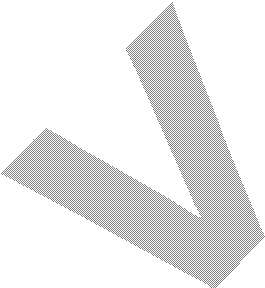
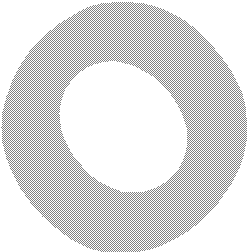
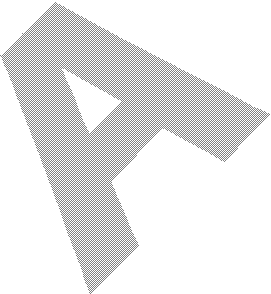
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| Clinical Specialty | Ophthalmology |
| Generic Name | **KERATOMETER (MANUAL)** |
| Clinical Purpose | Diagnostic. To determine the power of cornea. |
| **TECHNICAL SPECIFICATIONS** | |
| Corneal radius of curvature 6.6mm to 9.2mm or better. Corneal refractive power ranging from 36.5D to 51D or better. Axis of corneal astigmatism 0 to 180.  Javal/Shiotz/Sutcliffe/Internal reading | |
| **ACCESSORIES:**  Dust cover  Local made motorized table. | |



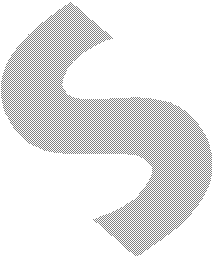
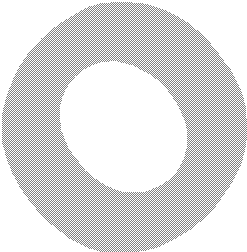
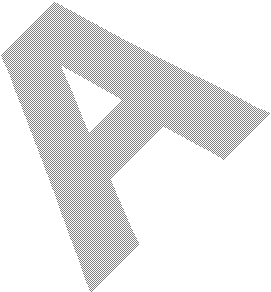
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| Clinical Specialty | Ophthalmology |
| Generic Name | **PNEUMATIC TONOMETER** |
| Clinical Purpose | Diagnostic. To determine intraocular pressure. |
| **TECHNICAL SPECIFICATIONS** | |
| Non contact with measurable range 5 to 50 mmHg or better in 1mmHg step. | |
| **ACCESSORIES:**  With standard accessories, safety locks and built in printer. With locally made motorized table. | |



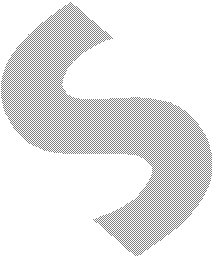
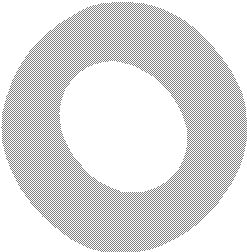
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| Clinical Specialty | Ophthalmology |
| Generic Name | **DIAGNOSTIC LENSES** |
| Clinical Purpose | Diagnostic/Examination of Eye |
| **TECHNICAL SPECIFICATIONS** | |
| 68, 78, 90, super field, 3 mirror, indentation gonio lens or any other required by end user. | |



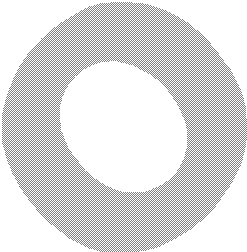
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| Clinical Specialty | Ophthalmology |
| Generic Name | **LASER APPLICATION LENSES** |
| Clinical Purpose | Diagnostic/Examination of Eye |
| **TECHNICAL SPECIFICATIONS** | |
| End user to specify | |



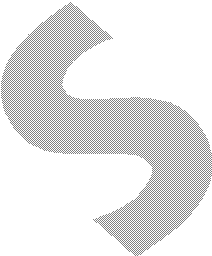
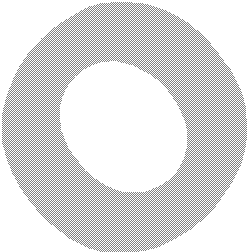
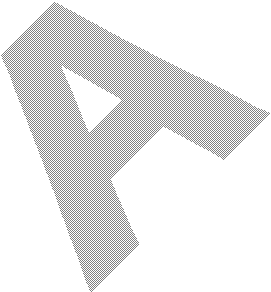
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| Clinical Specialty | Ophthalmology |
| Generic Name | **PERKINS TYPE HANDHELD TONOMETER** |
| Clinical Purpose | Diagnostic. For measurement of intraocular pressure in children. |
| **TECHNICAL SPECIFICATIONS** | |
| Applanation tonometer for IOP. Hand held type.  Double prism interchangeable. Compact light weight.  Built in illumination.  Scale range of 1 to 60 mmHg. Direct reading on dial scale. | |
| **ACCESSORIES:**  With two prisms and two calibration weights. Complete in case.  Dry battery cell operated. | |



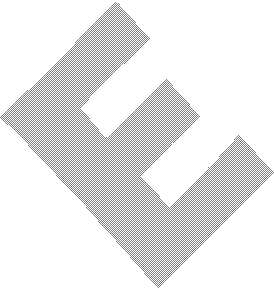
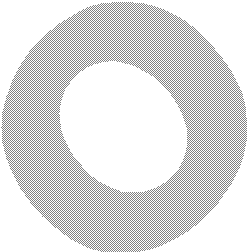
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| Clinical Specialty | Ophthalmology |
| Generic Name | **COLOUR VISIONTESTING CHART** |
| Clinical Purpose | Diagnostic/Examination of Eye |
| **TECHNICAL SPECIFICATIONS** | |
| Ishihara type.  The test to consist of 24 plates or more to be used to test for congenital colour blindness.  Each plate to present a design consisting of numeralsand winding lines formed by coloured dots with a background of coloured dots, the plates to be numbered and to be supplied with a protective cartonand an instruction book. | |



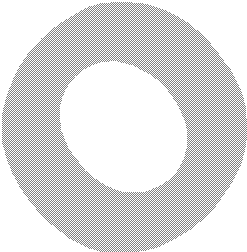
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| Clinical Specialty | Ophthalmology |
| Generic Name | **EXOPHTHALMOMETER** |
| Clinical Purpose | Diagnostic. To check protrusion of eye. |
| **TECHNICAL SPECIFICATIONS** | |
| Hertel type exophthalmometer to have a scale to measure the distance between the lateral canthi and a scale on either side to measure the protrusion of each eye. | |



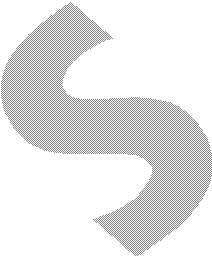
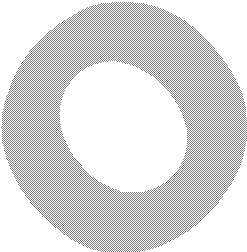
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| Clinical Specialty | Ophthalmology |
| Generic Name | **MADDOX ROD** |
| Clinical Purpose | Diagnostic/Examination of Eye |
| **TECHNICAL SPECIFICATIONS** | |
| Franceschetti  Phoria test/Maddox. Franceschetti Maddox rod | |



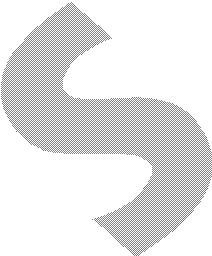
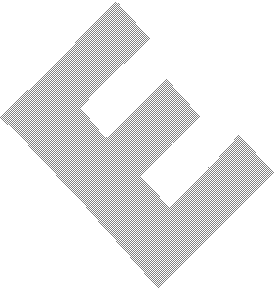
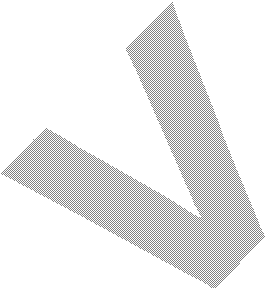
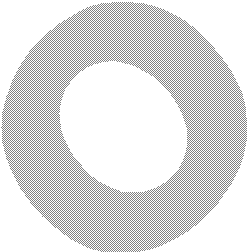
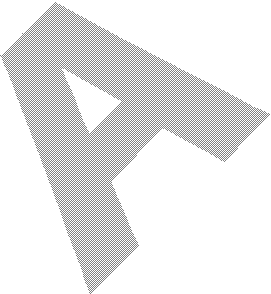
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| Clinical Specialty | Ophthalmology |
| Generic Name | **ORTHOPTIC SET** |
| Clinical Purpose | Diagnostic/Examination of Eye |
| **TECHNICAL SPECIFICATIONS** | |
| To be specified by user | |



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| Clinical Specialty | Ophthalmology |
| Generic Name | **PRISMS SET LOOSE** |
| Clinical Purpose | Diagnostic/Examination of Eye |
| **TECHNICAL SPECIFICATIONS** | |
| 0.5, 1, 2, 3, 4, 5, 6 7, 8, 9, 10, 12, 14, 16, 18, 20, 25,30, 35, 40, 45, 50D, red filter.  To be supplied in a case | |



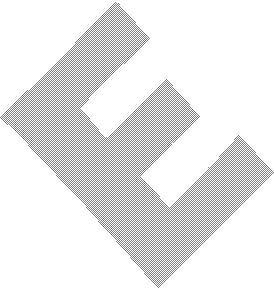
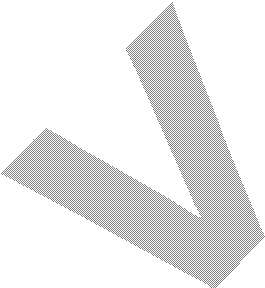
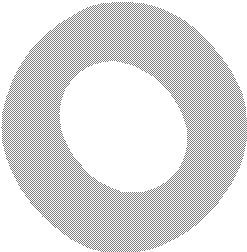
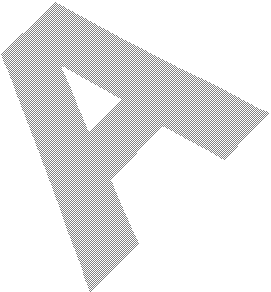
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| Clinical Specialty | Ophthalmology |
| Generic Name | **PRISM BAR** |
| Clinical Purpose | Diagnostic/Examination of Eye |
| **TECHNICAL SPECIFICATIONS** | |
| Vertical and horizontal | |



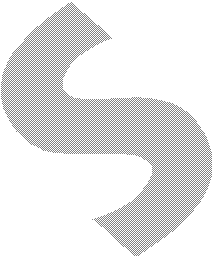
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| Clinical Specialty | Ophthalmology |
| Generic Name | **BJERRUM SCREEN 2M** |
| Clinical Purpose | Diagnostic/Examination of Eye |
| **TECHNICAL SPECIFICATIONS** | |
| Screen to be made of best quality lack velour cloth.  To be supplied on a spring roller so it may be retractedwhen not in use.  To be supplied complete with Traquair targets for use with the screen in red-green and blue- white discs and a long handle all in a case. | |



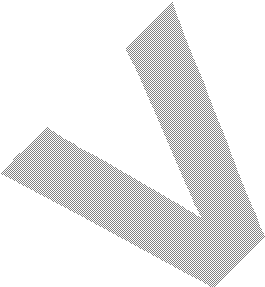
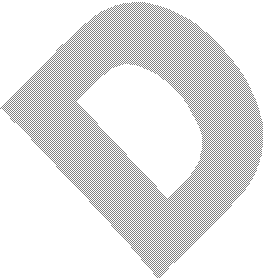
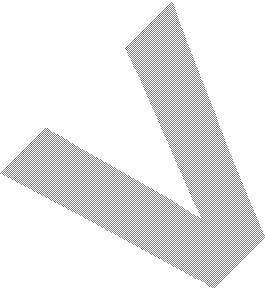
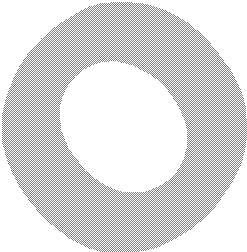
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| Clinical Specialty | Ophthalmology |
| Generic Name | **HESS SCREEN ELECTRIC WITH CHIN REST** |
| Clinical Purpose | Diagnostic/Examination of Eye |
| **TECHNICAL SPECIFICATIONS** | |
| Unit to consist of a screen, which incorporates the original Hess pattern. To be supplied with Diplopia goggles, a torch and then by using these in association with the illuminated screen Pattern, eye dissociation may be diagnosed. | |



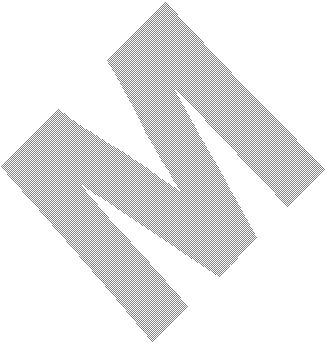
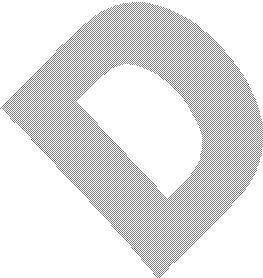
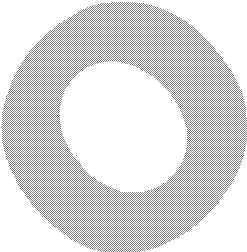
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| Clinical Specialty | Ophthalmology |
| Generic Name | **STEREO TEST WIRT FLY** |
| Clinical Purpose | Diagnostic/Examination of Eye |
| **TECHNICAL SPECIFICATIONS** | |
| Frisby stereo test. | |
| **ACCESSORIES:**  To be supplied with stereo test screener | |



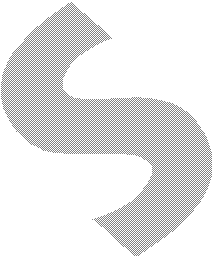
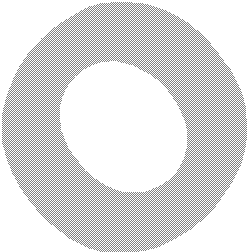
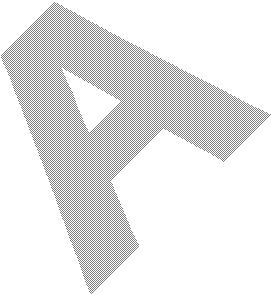
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| Clinical Specialty | Ophthalmology |
| Generic Name | **MADDOX WING** |
| Clinical Purpose | Diagnostic/Examination of Eye |
| **TECHNICAL SPECIFICATIONS** | |
| Hand held wing test used for testing for the detection and measurement of heterophoria. Metal construction with arrow and scale. | |



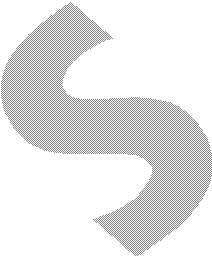
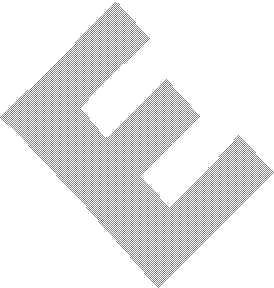
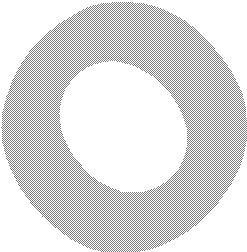
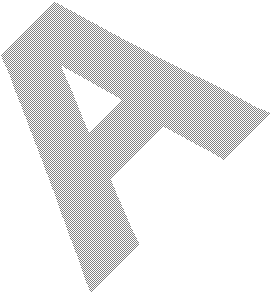
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| Clinical Specialty | Ophthalmology |
| Generic Name | **VISION TESTING BOX FOUR SIDED WALL MOUNTED (SNELLENS)** |
| Clinical Purpose | Diagnostic/Examination of Eye |
| **TECHNICAL SPECIFICATIONS** | |
| Testing box to be wall mounted, to be supplied with the following panels, 1 English alphabet  1 illiterate “E”,  1 Urdu alphabet and 1 K pictures  To be manually controlled | |



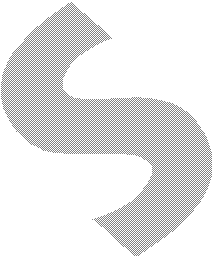
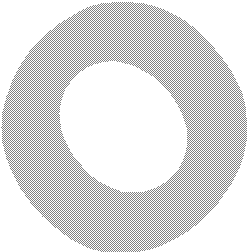
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| Clinical Specialty | Ophthalmology |
| Generic Name | **CHART PROJECTOR** |
| Clinical Purpose | Diagnostic/Examination of Eye |
| **TECHNICAL SPECIFICATIONS** | |
| With 20 charts or better including masks Pictures for children  Number and letters with cordless remote control | |
| **ACCESSORIES:**  Screen with 01 spare bulb | |



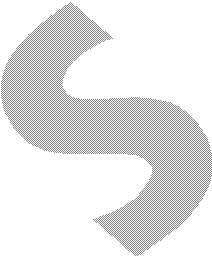
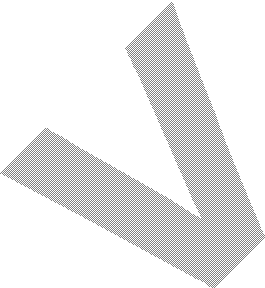
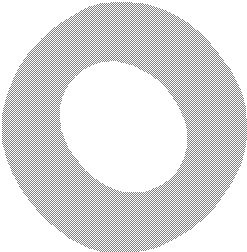
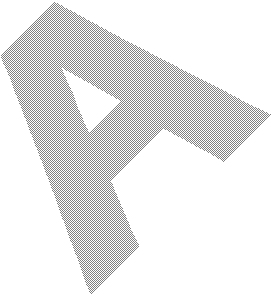
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| Clinical Specialty | Ophthalmology |
| Generic Name | **LCD/LED VISION CHART** |
| Clinical Purpose | Diagnostic/Examination of Eye |
| **TECHNICAL SPECIFICATIONS** | |
| 19 inch or better  Vision charts, Contrast sensitivity charts, color vision chart, pediatric vision charts | |



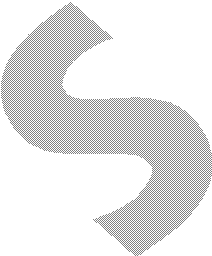
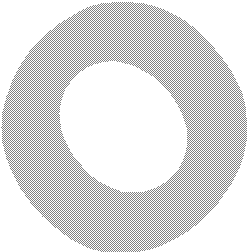
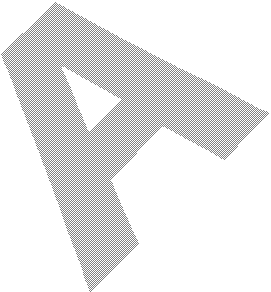
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| Clinical Specialty | Ophthalmology |
| Generic Name | **NON CONTACT/OPTICAL BIOMETER** |
| Clinical Purpose | Diagnostic/Examination of Eye |
| **TECHNICAL SPECIFICATIONS** | |
| Non contact measurements  Precise axial length values along the visual axis, independent of pupil size Measures myopes, aphakes, pseudophakes and silicone-filled eyes Automatic right / left eye recognition  Axial length measurement Keratometry/Corneal radius Anterior chamber depth  Formulae for IOL calculation: SRK-II, SRK-T, Holladay, Hoffer Q, Haigis Data export to CD-RW / USB flash drive | |
| **ACCESSORIES:**  With original motorized table/Imported from Europe/Japan/USA. | |



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| Clinical Specialty | Ophthalmology |
| Generic Name | **NON MYDRIATIC FUNDUS CAMERA:** |
| Clinical Purpose | Diagnostic/Examination of Eye |
| **TECHNICAL SPECIFICATIONS** | |
| Type: Non Mydriatic. Picture angle: 45 degree.  Working distance: 30 mm or above. Minimum Pupil Diameter: 4mm or better Camera: Provided by the Manufacturer. Display: LCD | |
| **ACCESSORIES:**  With original motorized table/Imported from Europe/Japan/USA. | |



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| Clinical Specialty | Ophthalmology |
| Generic Name | **HANDHELD SLIT LAMP** |
| Clinical Purpose | Diagnostic/Examination of Eye |
| **TECHNICAL SPECIFICATIONS** | |
| With stereo microscope Magnification: 10X and 16X Variable slit  Standard filters Power supply unit | |
| **ACCESSORIES:**  With rechargeable battery pack Complete with carrying case | |



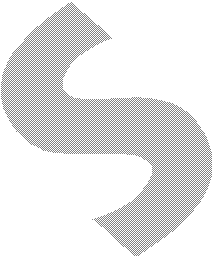
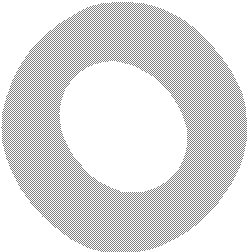
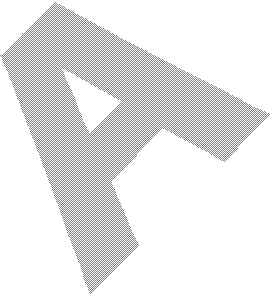
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| Clinical Specialty | Ophthalmology |
| Generic Name | **ULTRASONIC PACHYMETRY** |
| Clinical Purpose | Diagnostic. To determine thickness of cornea. |
| **TECHNICAL SPECIFICATIONS** | |
| Providing corneal thickness measurements Featuring freeze frame  Microprocessor controlled electronics Audible beep on proper positioning  Corneal thickness averaging based on multiple measurements | |
| **ACCESSORIES:**  Solid probe Printer | |



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| Clinical Specialty | Ophthalmology |
| Generic Name | **DIGITAL LENSMETER** |
| Clinical Purpose | Diagnostic. For measurement of intraocular pressure. |
| **TECHNICAL SPECIFICATIONS** | |
| Type: Auto Display on LCD  Vertex power range: 0 to +/-25D Step 0.25D  Cylindrical axis: 0 to 180°  Prismatic power range: 9 prism D or better Electrically 220V, 50Hz | |

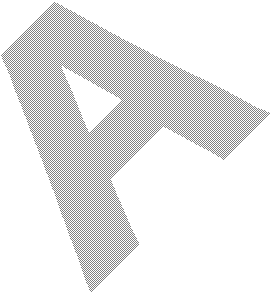


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| Clinical Specialty | Ophthalmology |
| Generic Name | **HAND HELD TONOMETER (TONOPEN TYPE)** |
| Clinical Purpose | Therapeutic. Used in retinal surgery. |
| **TECHNICAL SPECIFICATIONS** | |
| with measurable pressure range 7 to 50mm Hg or better  and | |
| **ACCESSORIES:**  Standard Accessories | |

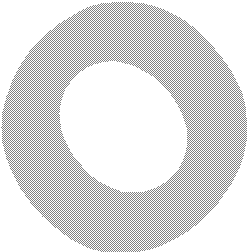
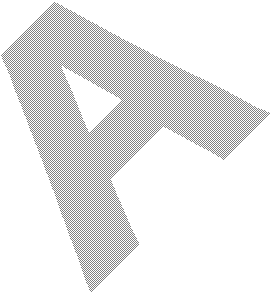


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| Clinical Specialty | Ophthalmology |
| Generic Name | **CRYOSURGICAL UNIT** |
| Clinical Purpose | Therapeutic/Surgery of Eye |
| **TECHNICAL SPECIFICATIONS** | |
| Console with foot switch Pressure regulator Pressure gauge Temperature Display Non-electric defrost On/off pedal switch  Can be used on CO2 or nitrous oxide gas Filter  And attachments such as connecting hose and reducer Retina and Glaucoma probes with tubing. | |

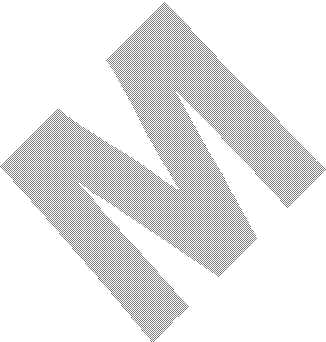
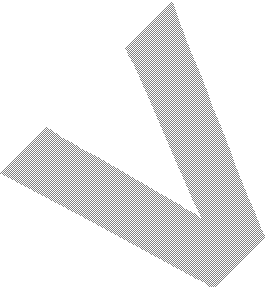
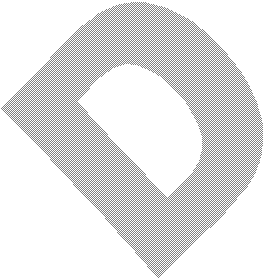
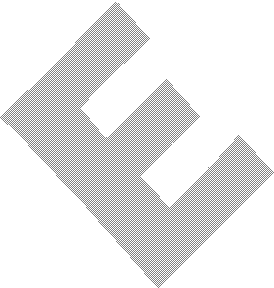
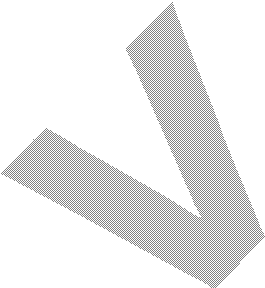
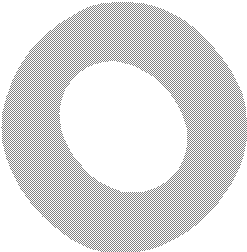




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| Clinical Specialty | Ophthalmology |
| Generic Name | **LOUPES WITH LIGHT** |
| Clinical Purpose | Diagnostic/Examination of Eye |
| **TECHNICAL SPECIFICATIONS** | |
| 2.5 x and above | |

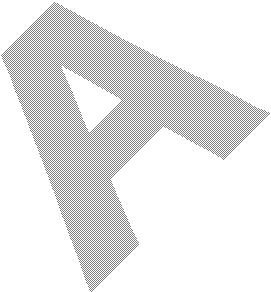


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| Clinical Specialty | Ophthalmology |
| Generic Name | **HAND HELD AUTO REFRACTOMETER WITH KERATOMETER** |
| Clinical Purpose | Diagnostic. To determine the refractive error of the eye and power. |
| **TECHNICAL SPECIFICATIONS** | |
| With auto measurement & printout with standard accessories. Measuring range:  Spherical: ±17D or better. Cylinder: ±6 D or better. Axis: 1 to 180o.  Display: LCD monitor  MEASUREMENT OF RADIUS OF CURVATURE  Radius of curvature 5.00 to 11.00 mm (in 0.01mm increment) Corneal astigmatism in 0.25D increment  Cylinder Axis 1° to 180° Electric power: 220-240V AC, 50Hz.  Rechargeable battery workstation | |

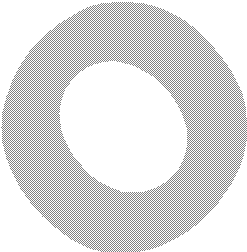
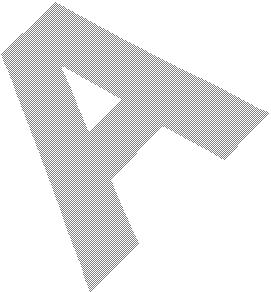


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| Clinical Specialty | Ophthalmology |
| Generic Name | **SPECULAR MICROSCOPE** |
| Clinical Purpose | Diagnostic/Examination of Eye |
| **TECHNICAL SPECIFICATIONS** | |
| Acquisition mode: Non-contact, automatic  Picture size: 0.25 mm x 0.50 mm or better  Measurement accuracy: ±10 μm  LCD screen: 8.4” or better  User interface: Touch-screen  Voltage supply: 230V-240V ac ±10% / 50 Hz, 60 Hz | |
| **ACCESSORIES:**  With printer and  Local made motorized table. | |





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| Clinical Specialty | Ophthalmology |
| Generic Name | **CONTRAST SENSITIVITY CHARTS** |
| Clinical Purpose | Diagnostic/Examination of Eye |
| **TECHNICAL SPECIFICATIONS** | |
| Cardiff Pediatric Contrast Sensitivity Test covers 12 contrast levels from 2.17 to 100 Preferential Looking Test Hiding Heidi testing varying levels of 1.25%, 2.5%, 5%, 10%, 25% and  100%.  Pediatric and Adult Near Contrast Test Books testing 20/400 to 20/10 in 17 increments Low contrast flip charts various age groups  Illuminated low vision test charts | |



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| Clinical Specialty | Ophthalmology |
| Generic Name | **INTRAOPERATIVE OCT** |
| Clinical Purpose | Retinal Surgery |
| **TECHNICAL SPECIFICATIONS** | |
| Spectral domain intraoperative OCT, User specified | |

