

TECHNICAL SPECIFICATION OF HOLMIUM LASER (100 WATTS)	
A	Electrical characteristics
1	It should be useable with single phase 200-240 VA 50/60Hz, <32 Amp's Power Supply.
2	The protection against over-voltage and over-current line conditions should be provided.
B	Structural & operational characteristics
1	Laser Urology Platform should be capable to perform vaporization & enucleation of the Prostate, Flexible Ureterorenoscopic Lithotripsy, PCNL as well as stone dusting.
2	It should be able to Enucleate & vaporize any adenoma tissue in BPH treatment of any size. It should be able to optimally ablate/coagulate/excise/incise soft tissue.
3	It should be able to fragment calculi of any size in the bladder, ureter or kidney and any impacted stone fragment in above stated areas.
4	It should be able to ablate superficial bladder, urethral & ureteral tumors
5	It should be able to treat bladder carcinoma, upper TCC & condylomas and lesions of the external genitalia
6	Stone dusting and embedded homeostasis capabilities should be available.
7	It should have power output of 100 watts delivered through optimal number of Laser generator with an ability to continue using the system with a reduced power capability in instances where there is a technical limitation of the current environmental conditions are not optimal. There should preferably an option to upgrade the system to 150 watts
8	It should be supplied with a Foot switch with Two-foot pedals with an ability to switch between Ready and Stand-By modes by using a Foot Pedal dedicated button. Foot pedals should be used for Cut/coagulation and Fragmentation/Dusting of Stones and additionally it must have the facility to switch between two different system settings.
9	It should be able to do pulse reshaping i.e., long pulse and Short Pulse to address bleeders and minimize retropulsion.
10	The wavelength of the laser system should be at least 2.1 um.
11	The minimum optical power of the system must be at least 100W.
12	The system should have a repetition rate of minimum 70 Hz and the pulse energy should be minimum 6 Joules having energy intervals of 0.1 Joules with pulse duration of minimum 1500 micro sceconds.
13	Aiming beam of the system should be Green (wavelength 532 nm) with optimal intensity settings and blinking mode.
14	It should have a Touch Screen Color Display.
15	It should have a closed loop, self-contained water to air exchanger cooling system.
16	200-micron fiber should be able to support at least 25 watts of Power for good fragmentation and dusting of stone.
17	200-micron fiber should be able to support long pulse also.
18	The system should support long pulse, medium pulse and short pulse.
19	<p>It should be supplied with following accessories:</p> <ul style="list-style-type: none"> ● 500-600 Micron Reusable, Flexible Fiber 6 ● 355-400 Micron Reusable, Flexible Fiber 6 ● 200-275 micron Reusable, Flexible Fiber 6 ● 500-600 Micron Stripping and cleaving (set) 1 ● 355-400 Micron Stripping and cleaving (set) 1 ● 200-275 Micron Stripping and cleaving (set) 1 ● Fiber Inspection Scope 1 ● Scissors 1

20	<p>The Tissue Morcellator should provide rapid endoscopic removal of soft tissue and should be of same Make as of the main laser machine and should have following.</p> <p>It should have capacity to do aspiration and morcellation simultaneously.</p> <p>Tissue morcellator should include:</p> <ul style="list-style-type: none"> One control box One hand piece Two blade sets: Blade should be reusable One piece of sterile tubing, One sterilization tray One package each of 3 long cleaning brushes, 3 short cleaning brushes, and 3 endoscope adaptors.
C	Standards
1	The equipment should be BIS/CDSCO/US FDA /European CE approved.
2	All the equipment including morcellator and accessories should be from the same manufacturer/principal company.
D	Warranty & CMC
1	System should have warranty of 05 years followed by 05 years CMC