

Ceralas® V - The Ultimate Research Surgical Diode Laser System



The Ceralas V Diode Laser is an economical state of the art surgical laser designed for surgical procedures involving a wide range of animals sizes. Three systems offer power ranges from 6 to 25 watts. The Ceralas 980 nm Diode Laser is highly absorbed by water, hemoglobin and oxyhemoglobin making this laser a good cutter and coagulator of soft tissue.

The 980 nm Diode can be used to vaporize, ablate, and coagulate while decreasing postoperative pain, swelling and recovery time. This laser offers the unique capability to optically cut tissue through its absorption in water and optically coagulate through its tremendous absorption in hemoglobin and oxyhemoglobin. Therefore, it can cut like the CO₂, yet offers greater coagulation capability than the CO₂. There is no charring or necrosis of surrounding tissue.

The system has two modes of operation, Continuous and Repeated Pulse mode. In the continuous mode, the laser will deliver output radiation at the power level specified for as long as the foot switch is depressed. In repeated pulse mode, the laser will deliver output radiation at the power level specified in a pre-defined pulse format for as long as the foot switch is depressed up to the number of pre-programmed counts.

The system is extremely easy to use. An internal microcomputer allows the user control the functions and modes of operation of the unit. Program and display features include:

- The Laser Mode key on the front panel keyboard will display the systems parameters and treatment information, system status, instructions and error messages. In this mode four laser parameters can be modified; Power, Pulse On time, Pulse Off Time and Pulse Number.
- Laser Exposure information is also displayed on the front panel screen. Three values are displayed; Pulse, Treatment and Total exposure. The Pulse exposure is the energy that will be delivered in one pulse of operation. The quantity is the product to the laser power and pulse on time. The Treatment exposure is the energy that will be delivered by the total number of pulses selected by the user. This is the product of the laser power, pulse on time and pulse count. The total exposure is the total energy that has been delivered since the unit was powered up. The total exposure is zero and at power up and increases as the unit is operated.
- Power is adjusted by turning the power knob on the front panel from 0 to Max in 1-watt increments.

- Tissue can be cut and coagulated with no carbonization and little or no bleeding
- Similar coagulation effects as KTP-Argon but independent of tissue type
- CO₂ like cutting/ablation capability combined with proven flexible silica fiber delivery systems
- Higher absorption than Nd:YAG lasers
- Low cost, reusable, resterilizable, flexible fiber-optic delivery systems
- Dependable solid state diode laser technology requires minimal maintenance
- Computerized system maintains constant power
- Easy to program and use

- Enable/Standby key changes will change the status of the laser from a Standby (disabled) mode to an Enabled (active) mode. As a safety precaution, when the unit is turned to the Enable mode a 5-second audible alarm will sound after which the LASER READY message will be displayed on the screen. This audible alarm will also sound when the laser is in use.

The Ceralas V Diode Laser System is shipped complete with:

- Four delivery systems, two each of 400, and 600 micron fibers
- Hand pieces, two of each length 2.5 cm and 5 cm
- Safety Glasses
- Foot switch

Specifications

Laser Type	Multiplexed GaInAs/GaAs semiconductor lasers
Output Power	6, 15, or 25 W depending on model, adjustable in 1.0 W increments
Wavelength	980 ±30 nm
Operating Modes	Continuous and Pulsed
Pulse Duration:	
'ON' Time	0.1 to 99.9 sec
'OFF' Time	0.1 to 99.9 sec
Aiming Laser	Visible semiconductor red (635 ±10 nm) 4 mW (Class II)
Dimensions, H x W x D	25 x 38 x 50 cm (9.8 x 15 x 19.6 in)
Weight	12 kgs (26.5 lb)
Power Requirements	110/220 V, 50/60 Hz

Catalog No.	Product
CGS 8000.67	Ceralas V Surgical Laser System, 6 Watt
CGS 8001.67	Ceralas V Surgical Laser System, 15 Watt
CGS 8002.67	Ceralas V Surgical Laser System, 25 Watt
CGS 8003.67	Fiber Optic Cable, 400 micron Silica/Silica NA 0.35, pkg. of 2
CGS 8004.67	Fiber Optic Cable, 600 micron Silica/Silica NA 0.35, pkg. of 2
CGS 8005.67	Fiber Optic Cable, 400 micron HPCS NA 0.40, pkg. of 2
CGS 8006.67	Fiber Optic Cable, 600 micron HPCS NA 0.40, pkg. of 2
CGS 8007.67	Fiber Handpiece, 2.5 cm
CGS 8008.67	Fiber Handpiece, 5 cm