



Green Laser Photocoagulator GYC-1000

US EDITION



THE ART OF EYE CARE



GYC-1000 **Flexibility & Versatility**

Universal Design

The GYC-1000 utilizes a diode pumped solid-state laser to achieve long laser life and great efficiency at low heat emission. The GYC-1000 laser can be plugged into any standard power outlet and requires no external hookup for operation, yet achieves high power output (max. 1700 mW on the cornea). The GYC-1000's specially designed silent air cooling system minimizes the typical maintenance problems common to conventional plasma tube technology.

Light and Compact Green Laser

The compact (W215 x D280 x H90 mm) and lightweight (6.7 kg / 14.8 lbs.) console offers operational flexibility and treatment versatility - from the office to the O.R.



Ergonomically easy to handle

Low Power Consumption

The new technology - ITC (Intelligent Thermo Control) function - reduces the power consumption, offering optimum and economical control of the temperature under CPU management.

High Reliability

A digitally controlled instant duty cycle permits the laser to be used at very fast speeds and high powers for extended periods of time without failure. The GYC-1000 provides many years of superior, reliable performance.

1. Slit lamp delivery unit



NIDEK slit lamp delivery unit (NIDEK SL-1800)
Spot size: 50-990 μm continuously variable
Protective filter unit (motorized / fixed)

2. Attachable delivery unit



Attachable to NIDEK SL-1800 ZEISS SL130,30SL/M
Spot size: 50-990 μm continuously variable
Protective filter unit (motorized / fixed)



Attachable to HAAG STREIT 900BM
Spot size: 50-500 μm continuously variable

* HAAG STREIT 900BQ, Takagi SM-70 and NIDEK SL-450, 250 are also attachable

3. Endophotocoagulation delivery unit

Spot size: 400 μm (tip of probe)

Endophoto probe (5 pcs)



Protective filter unit (Usable with ZEISS or WILD surgical microscope)

4. Combination delivery unit

Attachable to NIDEK Ophthalmic Yag Laser YC-1300/1400/1600/1800



A dual-application combination photocoagulator / Yag laser system

GYC-1000 Optional Delivery Units

5. Binocular indirect ophthalmoscope delivery unit

Adjustable working distance allows effective photocoagulation at more favorable distance.

Keeler All Pupil II
Spot size: 185 (WD300)-556 (WD700) μm
(variable according to the working distance)

HEINE OMEGA 500 type
Spot size: 212 (WD300)-664 (WD700) μm
(variable according to the working distance)



Lightweight with bright, clear illumination



6. Dual delivery GYC 4DD-1

The dual delivery allows easy changeover with switching lever between two delivery systems.



7. Dual protective filter



For the endophotocoagulation delivery unit, the optional dual protective filter allows an assistant to safely observe the operation.

8. Carriage



Portable for remote use

Quiet Photocoagulator

The new technologies - DWC and IFC functions - reduce noise during coagulation:

DWC (Digital Wave Control) Function:

The DWC function reduces the mechanical noise, as the OPEN/CLOSE movement of the internal shutter is no longer necessary. The GYC-1000 controls the laser wave by digital signal from the CPU.

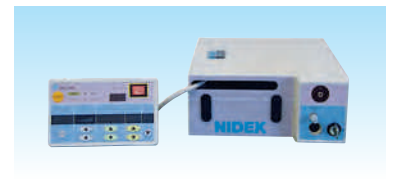
IFC (Intelligent Fan Control) Function:

The CPU periodically monitors the internal temperature, and reduces noise by controlling the ON/OFF of the cooling fan. In addition, the GYC-1000 incorporates a less noisy fan so the system is quiet even when the fan is working.

Noise Difference:
(Increase from room noise)
Former GYC 16.7 db
GYC-1000 1.6 db

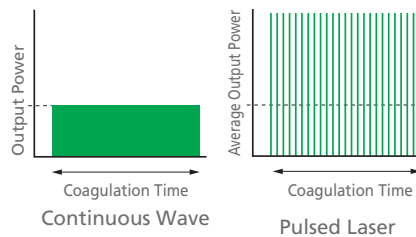
Detachable Control Panel

The GYC-1000's compact control panel is connected by a cord, and can be detached from the main body of the unit. The luminescent digital display with optimal back light provides easier operation in a dark room. With a slit lamp delivery unit, the spot size indication on the control panel enables setting and confirmation all at once.



True Continuous Wave (CW)

The GYC-1000's solid state laser is a true continuous wave (CW), not a pulsed laser. CW laser delivery assures predictable treatment results by eliminating the potential risks associated with pulsed laser systems.

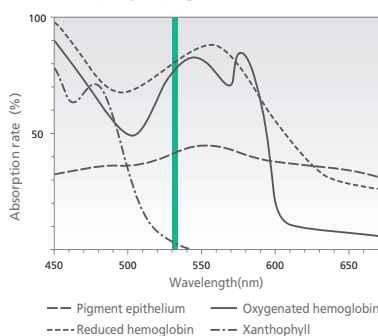


GYC-1000 Superior Performance

532 nm Green Laser

Efficient, safe photocoagulation is a hallmark of the GYC-1000. The 532 nm laser beam passes through the ocular media with low attenuation to minimize power loss.

- Higher absorption by the pigment epitheliopathy, hemoglobin, and oxidized hemoglobin
- Lower absorption by the xanthophyll pigment



Reference: Folia Ophthalmol. Jpn. 40(5)1128-1133,1989

Treatment with Precision

Exposure time of conventional lasers can be adjusted in 0.10 second increments, from 0.10 to 1.00 second.

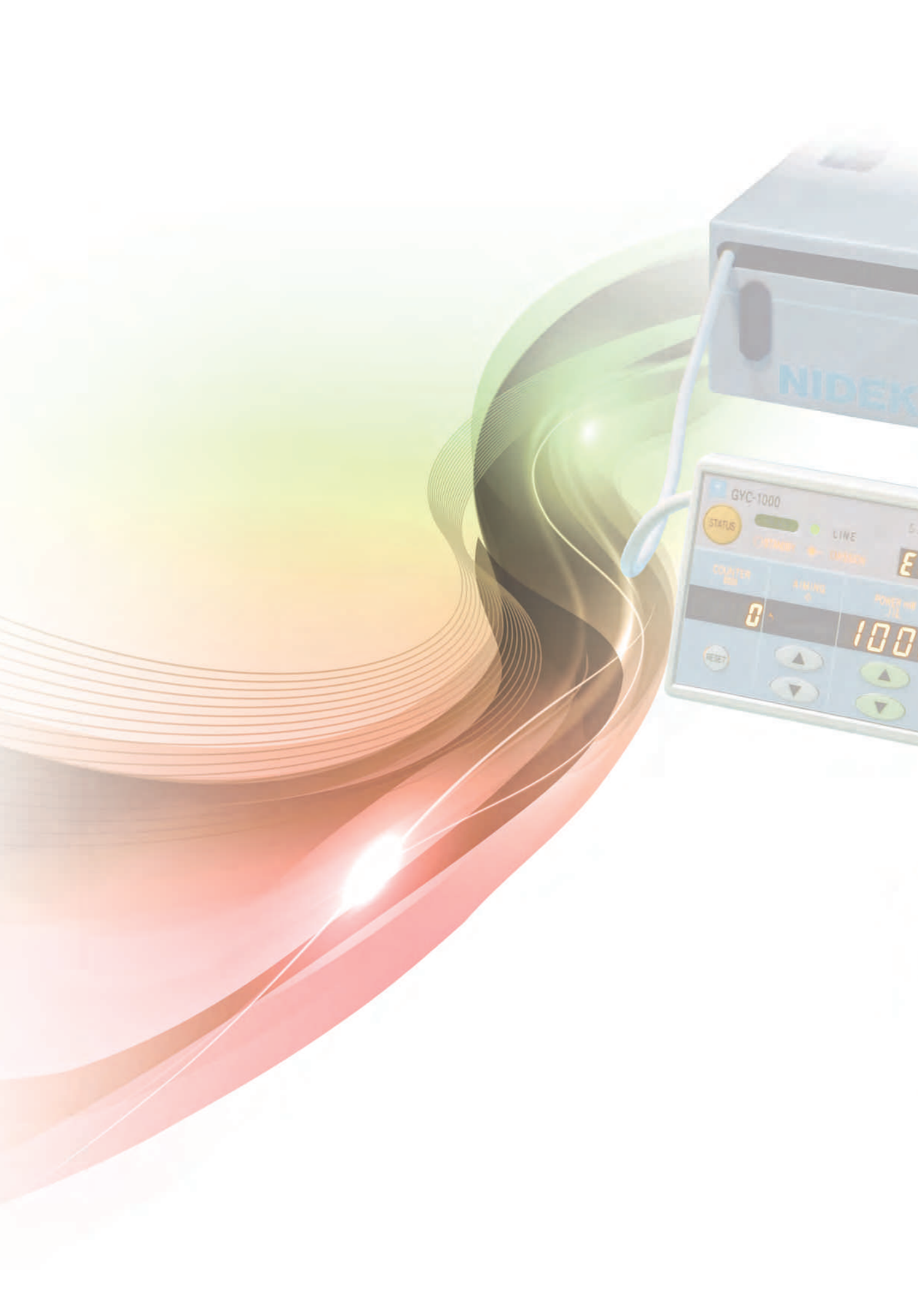
The GYC-1000's exposure time can be adjusted in 0.05 second increments from 0.10 to 0.50 second, which is widely used range for photocoagulation. The finer adjustments provide more precise treatment for patients.

Exposure time

- 0.01 to 0.10 s (0.01 s increment)
- 0.10 to 0.50 s (0.05 s increment)
- 0.50 to 1.00 s (0.10 s increment)
- 1.00 to 3.00 s (1.00 s increment)

Safety Features

The GYC-1000 has a variety of safety features: it is equipped with a filter that reduces the power of the reflected green laser to $1/10^4$ or less; the error indicator function displays the nature of the error encountered on the time display of the control panel; the system conducts a self-diagnosis to monitor the system condition; and more.



NIDEK

GYC-1000

STATUS

LIVE

CHARGING

CHARGING

COOLING

SHINE

POWER

0

100

RESET

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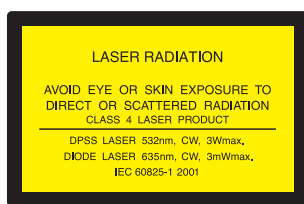
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GYC-1000 Specifications

Treatment laser	Frequency-doubled diode pumped solid state laser
Wavelength	532 nm
Output power	50 to 1700 mW
Output type	Continuous wave
Exposure time	0.01 to 3.00 seconds
Interval time	0.1 to 1.0 second
Aiming laser	Red diode, 635 nm, max. 0.2 to 0.4 mW
Power supply	AC 100 to 240 V, 50 / 60 Hz
Power consumption	200 VA
Dimensions / Mass	215(W) x 280(D) x 90(H) mm / 6.7 kg 8.5(W) x 11.0(D) x 3.5(H)" / 14.8 lbs.
Optional delivery	Slit lamp delivery (NIDEK) Attachable delivery (NIDEK, ZEISS, HAAG STREIT, etc.) BIO delivery, MIO delivery Endophotocoagulation delivery



Caution: U.S. Federal Law restricts this device to sale, distribution, and use by or on the order of a physician or other licensed eye care practitioner.

Specifications may vary depending on circumstances in each country.

Specifications and design are subject to change without notice.



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