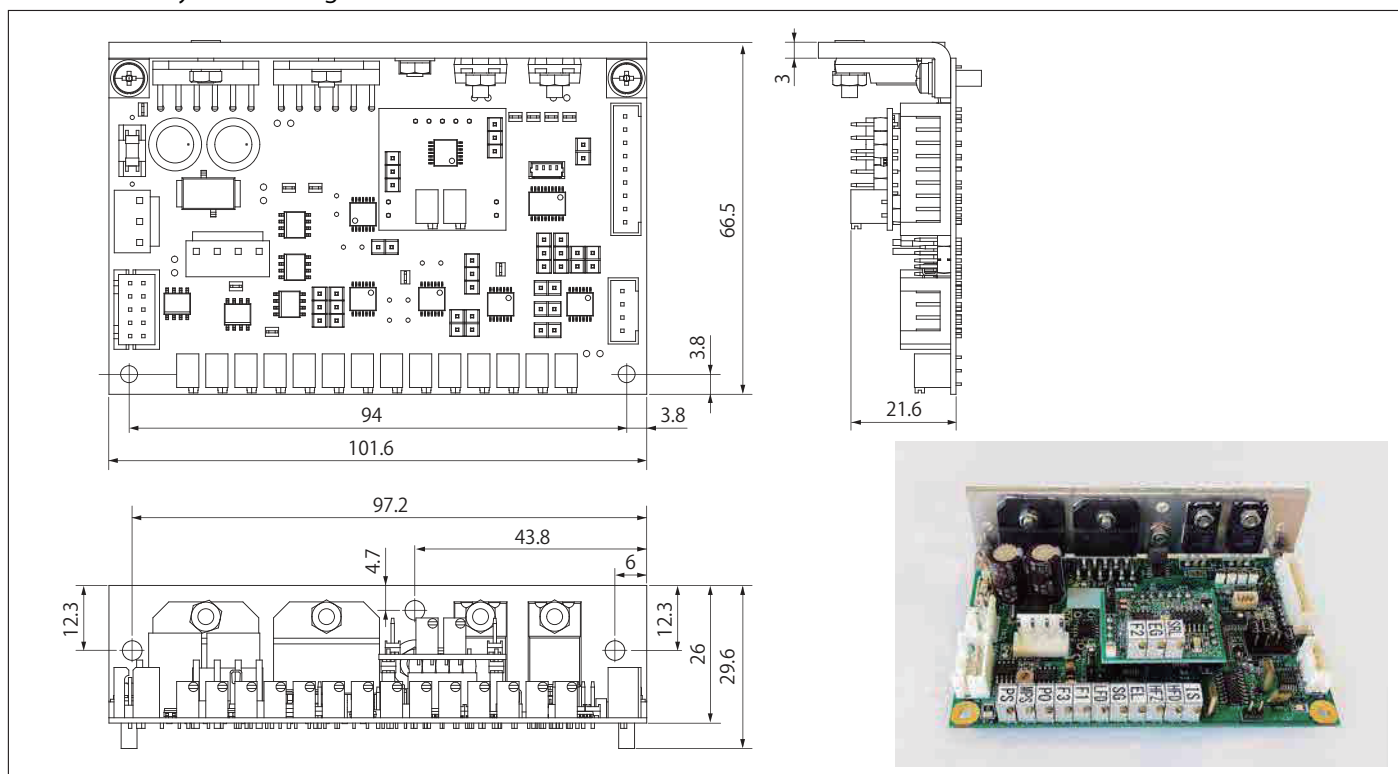


# Galvanometer Optical Scanner Driver

## GVD1

### External Layout Drawing

(Unit : mm)



### Specifications

Model		GVD1 - ***** - **
Power	Power Voltage	± 15V or ± 18V to ± 30V
	Maximum Operating Current	5.0A RMS
	Peak Current	11.5A
Command Signal Input	Voltage (Differential)	± 3V / ± 5V / ± 10V
	Input Impedance	20k Ω (At differential input)
Monitor Output	Position Output	± 1.5V / ± 2.5V / ± 5V
Function	Input Signal	Servo OFF
	Output Signal	Position, Speed, Current, Position error, Alarm, 90% Load warning
	Protection	Over heating
		Over positioning
		Over current
		Sensor error
		Power source voltage
		Alarm, 90% Load warning
Ambient Temperature Range		0°C to + 50°C
Dimension		101.6 x 66.5 x 30.8 mm
Weight		90g (with heat sink)

Our Galvanometer Optical Scanner Servo Drivers (GVD Series) have two options in control system : P Control and PI Control Systems. Please read the following descriptions of the control systems and select one according to the application.

#### P Control :

This control will output signal which is proportional to the differential by comparing position feedback and command signal. The scanner responds fast and settles position quickly because servo closed loop band becomes high by not integrate the time. In case of distortion or friction, a position error may occur against the command.

#### PI Control :

This control will output signal which is proportional to the differential by comparing position feedback and command signal, and integrate the time of differential. Therefore, it is possible to maintain a stationary state (a state with extremely small position error) regardless of distortion or friction. This integration provides very high position repeatability.

Please select P Control if you are focusing on high speed of settling time, or PI control for high position repeatability.

■ Model Number

GVD0 / 1 / 2 - 0 0 0 0 0 0 - \* \*

Power Voltage

0 :  $\pm 15V$   
1 :  $\pm 24V$

Control System

0 : P Control  
1 : PI Control

Command Voltage

0 :  $\pm 10V$   
1 :  $\pm 3V$   
2 :  $\pm 5V$   
C : Customized Voltage

Mechanical Angle

0 :  $\pm 10^\circ$       Bumpers set for  $\pm 10^\circ$  scanning  
1 :  $\pm 5^\circ$         Bumpers set for  $\pm 5^\circ$  scanning  
2 :  $\pm 7.5^\circ$       Bumpers set for  $\pm 7.5^\circ$  scanning  
3 :  $\pm 12.5^\circ$     Bumpers set for  $\pm 12.5^\circ$  scanning  
4 :  $\pm 15^\circ$        Bumpers set for  $\pm 15^\circ$  scanning  
5 :  $\pm 20^\circ$        Bumpers set for  $\pm 20^\circ$  scanning  
C : Customized / Bumpers set for customized angle

Registered Custom Number

No Number : Standard Product  
\*It is only used for customized products

Beam Diameter (Mirror size)

0 :  $\varnothing 3mm$   
1 :  $\varnothing 5mm$   
2 :  $\varnothing 7.5mm$   
3 :  $\varnothing 10mm$   
4 :  $\varnothing 12.5mm$   
5 :  $\varnothing 15mm$   
6 :  $\varnothing 20mm$   
7 :  $\varnothing 30mm$   
C : Customized Size

Scanner Type

0 : 0930S  
1 : 0930L  
2 : 1445S  
3 : 1445L  
4 : 2260  
5 : 2280  
6 : 2510