

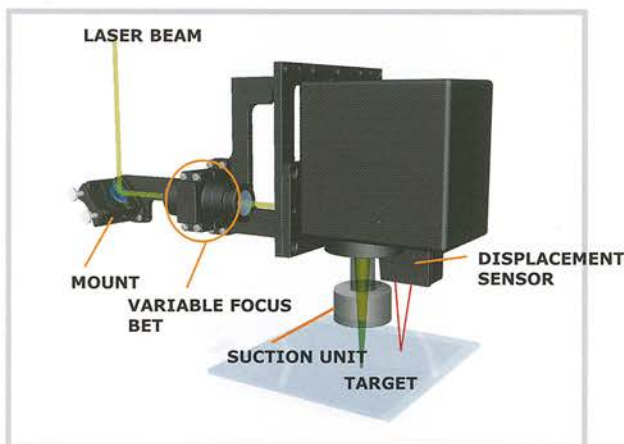
GLASS DRILLER

High Quality & High Speed High throughput & performance

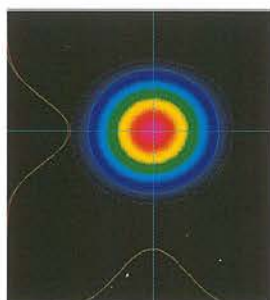
OVERVIEW

HardRAM Glass Driller, the leader in LASER glass Drilling technology, designs and builds industrial turnkey LASER systems to drill both metals and refractive materials.

We use our own optics, hardware, LASER control circuits and drilling software to achieve state-of-the-art drilling of Glass, these PDP area. Tests have proven, our techniques do not adversely affect the strength of the materials after marking.



► Using Variable Focus Bet, modify Focal Length, Measuring the height of a target using displacement sensor

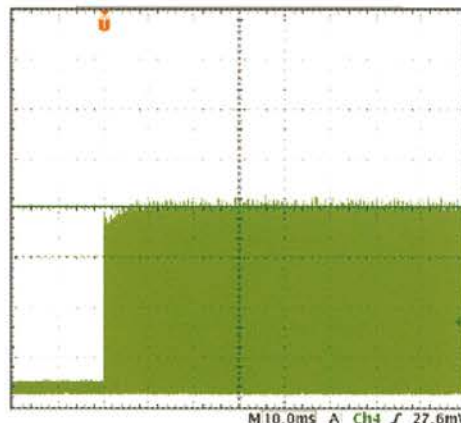


► Perfect Beam mode

KEY FEATURES

- Diode pumped LASER : UV 355nm
- Driller depth control
- High throughput & performance
- User friendly software
- Compact & easy integration
- Maintenance free over 5,000 hours
- Field-replaceable diode module
- Robust scan head
- Powerful editing software
- High efficiency, High stability
- Advanced technology application

► Continuous Wave to 80-kHz Internal Trigger Mode



SAMPLE



2.8t 4mm



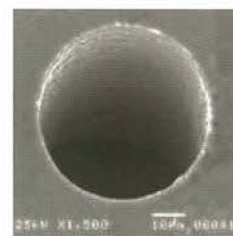
2.8t 3mm



1.8t 4mm



1.8t 2mm

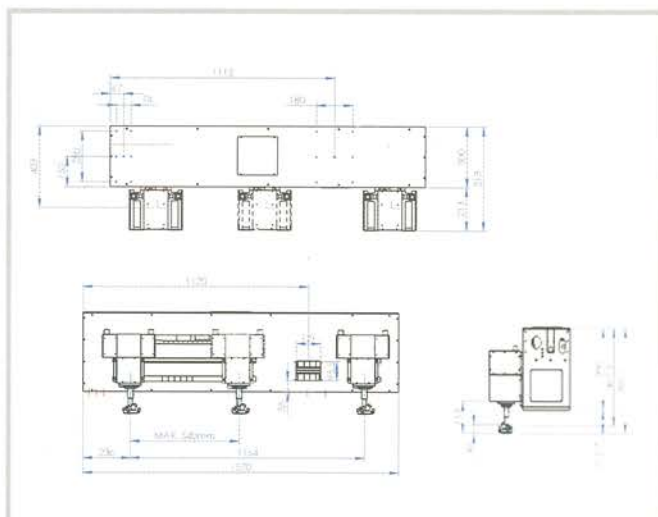


GLASS DRILLER

SYSTEM SPECIFICATIONS

SPECIFICATION	
MODEL	GLASS DRILLER
Wavelength	355nm
Beam Mode	TEM ₀₀
LASER Power (Maximum Output Power)	10W
SCAN HEAD	
Scan area	30mm x 30mm
Working distance	70mm
Hole Depth (Glass Depth)	1.8t, 2.8t
Hole size	1mm ~ 20mm (Typical 2.0mm ± 0.2mm)
Drilling Method	Galvanometer Scan
Spot size	Below 10um
UTILITY	
Cooling Method	Water Cooling
Supply Voltage	AC220V, 50/60Hz, Single phase
ENVIRONMENT	
Operating Temperature	10~35℃
Operating Humidity	5~90% (non-condensing)
CONTROLLER	
CPU	Intel / Core 2 Dou
RAM	1GB
HDD	80GB
OS	Windows XP

DRAWING



SOFTWARE FUNCTIONS

- Support various data parameter for the hole processing of Multi head
- 3 level control for quality improvement of Hole processing
- Variable Focus BET control for Depth adjustment
- Selective head usage Hole process
- Control the Drilling Head position (for adjusting Hole processing position)
- S/W UI for user convenience
- Support Single head and Multi head Test hole processing

hardram
LASER SOLUTION FOR FPD & SEMICONDUCTOR

COMPANY BRANCH OFFICE

Company Branch Office Homepage : www.hardram.co.kr
#301, Lotte Suntech-city B/D, 513-15,
Sangdaewon-Dong, Jungwon-Gu, Sungnam-Si, Gyeongki-Do, Korea
TEL : +82-31-777-2440 FAX : +82-31-777-2445