

## 상 세 규 격 서

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### 상 세 내 역

#### 1. 주요규격

##### 1-1. Mount for Single-Axis QS7 and QS10 Galvanometer Systems Metric

- Two-Piece Clamp Mechanism Avoids Contact With Mirror Surfaces
- Vertical or Horizontal Mounting on Posts or Translation Stages
- Dowel Hole/Slot Design for Repeatable Precision Mounting on MT Translation Stages
- The galvo is secured using a two-piece clamp, allowing it to be installed without passing the sensitive mirror through the mount
- 모델 사진



##### 1-2. Mount for Single-Axis QS15 and QS20 Galvanometer Systems Metric

- Two-Piece Clamp Mechanism Avoids Contact With Mirror Surfaces
- Vertical or Horizontal Mounting on Posts or Translation Stages
- Dowel Hole/Slot Design for Repeatable Precision Mounting on MT Translation Stages
- The galvo is secured using a two-piece clamp, allowing it to be installed without passing the sensitive mirror through the mount
- 모델 사진



1-3. Ø10 mm Beam Galvo System X-Axis Protected Silver Mirror (Power Supply & Cables Sold Separately)

- Mirror Orientation : Horizontal
- Mirror Coating : Protected Silver: Rabs  $\geq 92\%$  (450 - 500 nm)  
Rabs  $\geq 94.5\%$  (500 - 2000 nm)  
Rabs  $\geq 98\%$  (2 - 10.6  $\mu\text{m}$ )
- Max Beam Diameter : 10 mm
- Position Detector : Optical
- Rated Excursion :  $\pm 22.5^\circ$  Optical
- Recommended Rotor Inertial Load :  $0.17 \text{ g} \cdot \text{cm}^2$
- Step Response Time : 350  $\mu\text{s}$
- Housing Diameter : 14 mm
- 모델 사진



1-4. Ø10 mm Beam Galvo System Y-Axis Protected Silver Mirror (Power Supply & Cables Sold Separately)

- Mirror Orientation : Vertical
- Mirror Coating : Protected Silver: Rabs  $\geq 92\%$  (450 - 500 nm)  
Rabs  $\geq 94.5\%$  (500 - 2000 nm)  
Rabs  $\geq 98\%$  (2 - 10.6  $\mu\text{m}$ )
- Max Beam Diameter : 10 mm

- Position Detector : Optical
- Rated Excursion :  $\pm 22.5^\circ$  Optical
- Recommended Rotor Inertial Load :  $0.17 \text{ g} \cdot \text{cm}^2$
- Step Response Time :  $350 \mu\text{s}$
- Housing Diameter : 14 mm
- 모델 사진



1-5. Ø15 mm Beam Galvo System X-Axis Protected Silver Mirror (Power Supply & Cables Sold Separately)

- Mirror Orientation : Horizontal
- Mirror Coating : Protected Silver: Rabs  $\geq 92\%$  (450 - 500 nm)  
Rabs  $\geq 94.5\%$  (500 - 2000 nm)  
Rabs  $\geq 98\%$  (2 - 10.6  $\mu\text{m}$ )
- Max Beam Diameter : 15 mm
- Position Detector : Optical
- Rated Excursion :  $\pm 22.5^\circ$  Optical
- Recommended Rotor Inertial Load :  $1.8 \text{ g} \cdot \text{cm}^2$
- Step Response Time :  $600 \mu\text{s}$
- Housing Diameter : 22 mm
- 모델 사진



1-6. Ø15 mm Beam Galvo System Y-Axis Protected Silver Mirror (Power Supply & Cables Sold Separately)

- Mirror Orientation : Vertical
- Mirror Coating : Protected Silver: Rabs  $\geq 92\%$  (450 - 500 nm)  
Rabs  $\geq 94.5\%$  (500 - 2000 nm)  
Rabs  $\geq 98\%$  (2 - 10.6  $\mu\text{m}$ )

- Max Beam Diameter : 15 mm
- Position Detector : Optical
- Rated Excursion :  $\pm 22.5^\circ$  Optical
- Recommended Rotor Inertial Load :  $1.8 \text{ g} \cdot \text{cm}^2$
- Step Response Time :  $600 \mu\text{s}$
- Housing Diameter : 22 mm
- 모델 사진



1-7. USB 2.0 Type-A to Mini-B Cable 72" (1.83 m) Long

- Compatible with DXM Series of Ultrafast Photodetectors
- 모델 사진



1-8. XY Adapter Plate for MTS25 Series Translation Stages

- Stack Two MTS25-Z8 Stages in an XY Configuration
- Includes All Necessary Mounting Hardware and Alignment Pins for Orthogonality
- 모델 사진



1-9. Right-Angle Bracket for MTS25 Series Translation Stages

- Designed for XZ or XYZ Configurations
- Includes All Necessary Mounting Hardware and Alignment Pins for Orthogonality
- 모델 사진



1-10. Command and Power Cables Command and Power Cables Galvanometer Systems and GPS011 Series Power Supply

- Command and Power Cable Set for QS7/10 Series Scanning Galvanometer Systems and BLINK High-Speed Focusers
- Power cable: Three-pin circular connector on one end for compatibility with the GPS011 series and a four pin connector on the other end for compatibility with the BLINK focusers and QS7/10 galvos
- Command cable: BNC connector on one end for compatibility with a user-supplied controller and a two pin connector on the other end for compatibility with the BLINK focusers and QS7/10 galvos
- 모델 사진



1-11. Command and Power Cables for QG4/5 and QS15/20 Scanning Galvanometer Systems and GPS011 Series Power Supply

- Command and Power Cable Set for QG4/5 and QS15/20 Series Scanning Galvanometer Systems
- Power cable: Three-pin circular connector on one end for compatibility with the GPS011 series power supplies and a three pin connector on the other end for compatibility with the QG4/5 and QS15/20 galvos
- Command cable: BNC connector on one end for compatibility with a user-supplied controller and a four pin connector on the other end for compatibility with the QG4/5 and QS15/20 galvos.
- 모델 사진



#### 1-12. Angle Bracket for Edge-Mounted Arms

- Four holes for 4-40 screws, allowing it to connect with the PLSZ module
- Six M4 tapped holes that are spaced to mate with the M4 counterbores on our condenser arms
- 모델 사진



#### 1-13. Angle Bracket for Middle-Mounted Arms

- Four holes for 4-40 screws, allowing it to connect with the PLSZ module
- Six M4 tapped holes that are spaced to mate with the M4 counterbores on our condenser arms
- 모델 사진



#### 1-14. Motorized Module with 1" Travel 95 mm Dovetail

- Travel Range : 1" (25.4 mm)
- Bidirectional Repeatability : 5  $\mu$ m
- Backlash : 10  $\mu$ m
- Minimum Achievable Incremental Movement : 424 nm

- Minimum Achievable Repeatable Movement : 1.06  $\mu\text{m}$
- Velocity (Max) : 7 mm/s
- Acceleration (Max) : 11 mm/s<sup>2</sup>
- Cable Length : 6' (1.8 m)
- 모델 사진



## 2. 기타사항

가. 납품위치 : 경북 구미시 구미대로 350-27 XR 디바이스 개발 지원센터 207호

나. 납품개요 : 규격서의 조건에 맞는 시제품 납품

다. 납품기한 : 계약일로 부터 30일 이내

라. 계약의 이행

- 1) 본 규격서에 대한 주계약자(이하 “계약자” 라 한다)와 발주기관 간의 해석상 이견은 발주기관의 해석에 따라야 하며, 본 규격서에 특별히 명시되지 않은 사항은 정부계약법 등의 규정과 일반 관례에 따른다.
- 2) 발주기관은 계약내용 전부에 대한 권리를 행사할 수 있으며 계약자는 이에 대하여 전적으로 동의해야 한다.
- 3) 본 규격서에 명시된 모든 조항은 본 사업의 원활한 추진에 필요한 최소한의 사항만을 규정하였으므로 상세히 기술하지 않았거나 누락된 사항에 대해서도 정상운영 및 서비스에 문제가 발생되지 않도록 계약자는 사전 조치를 취하여야 한다.
- 4) 본 규격서에서 요구하는 성능 및 특성에 대해 계약자의 오인 또는 누락된 상태로 계약 체결되어, 계약 후 이를 보완하기 위한 설계 변경, 물품 등을 추가해야 할 경우 계약자 부담으로 시행한다.
- 5) 계약자는 공급하는 제품의 성능, 품질 등에 대한 최종적인 책임을 진다.

마. 하자보증기간 : 납품 후 1년

바. 규격관련 문의사항 : 광융합디스플레이연구센터 우성수 센터장 (054-460-9092)