

상 세 규 격 서

구분	품명	단위	수량	비고
1	O-Band Booster Optical Amplifier, CWL = 1290 nm (Typ.), Butterfly Pkg, PMF, FC/APC	ea	1	
2	7" x 4" Lab Jack, 2.26" Vertical Travel, 75 lbs Load Capacity	ea	1	
3	Fast-Change, SM1 Lens Tube Filter Holder for Filters	ea	2	
4	3500 μ L Macro Fluorescence Cuvette with Stopper, 2Pac	ea	1	
5	$\varnothing$ 1" Zero-Order Half-Wave Plate, SM1-Threaded Mount, 700-780 nm	ea	1	
6	$\varnothing$ 25.0 mm Premium Shortpass Filter, Cut-Off Wavelength: 700-800 nm	ea	1	
7	$\varnothing$ 25.0 mm Premium Longpass Filter, Cut-On Wavelength: 700-800 nm	ea	1	
8	$\varnothing$ 1" N-BK7 Broadband Precision Window, AR Coated: 650 - 1050 nm, t = 1 mm	ea	1	
9	$\varnothing$ 1/2" Harmonic Beamsplitter, Reflects 355 nm, Transmits 532 nm and 1064 nm	ea	3	
10	$\varnothing$ 1/2" Harmonic Beamsplitter, Reflects 1064 nm, Transmits 532 nm	ea	3	
11	$\varnothing$ 2" Harmonic Beamsplitter, Reflects 266 nm and 355 nm, Transmits 532 nm and 1064 nm	ea	3	
12	$\varnothing$ 2" Harmonic Beamsplitter, Reflects 266 nm and 355 nm, Transmits 532 nm and 1064 nm	ea	2	
13	$\varnothing$ 1" Motorized Precision Rotation Stage (Metric) Bundle with DC Servo Motor Driver and Power Supply	ea	1	
14	25 mm x 36 mm 50:50 UFS Plate Beamsplitter, Coating: 350 - 1100 nm, t = 1 mm	ea	1	
15	f = 100.00 mm, H = 30.00 mm, L = 60.0 mm, N-BK7 Plano-Convex Cylindrical	ea	2	
16	Adjustable Collimation Adapter	ea	1	
17	f = 4.51 mm, NA = 0.55 FC/PC Fiber Collimation Pkg.	ea	10	
18	$\varnothing$ 1" Nd:YAG Mirror, 1047 - 1064 nm	ea	5	
19	$\varnothing$ 1" Broadband Dielectric Mirror, 400 - 750 nm, 10 Pack	ea	1	

20	Round-to-Linear Bundle, 7 x Ø200 µm Core Fibers, Low-OH, SMA, 2 m Long	ea	2	
21	Metric Beam Dump	ea	1	
22	38.1mm Dia., Aluminum Coated, Aluminum Substrate Mirror	ea	6	

상 세 내 역

1. 구성

1. O-Band Booster Optical Amplifier, CWL = 1290 nm (Typ.), Butterfly Pkg, PMF, FC/APC
2. 7" x 4" Lab Jack, 2.26" Vertical Travel, 75 lbs Load Capacity
3. Fast-Change, SM1 Lens Tube Filter Holder for Filters
4. 3500 µL Macro Fluorescence Cuvette with Stopper, 2Pac
5. Ø1" Zero-Order Half-Wave Plate, SM1-Threaded Mount, 700-780 nm
6. Ø25.0 mm Premium Shortpass Filter, Cut-Off Wavelength: 700-800 nm
7. Ø25.0 mm Premium Longpass Filter, Cut-On Wavelength: 700-800 nm
8. Ø1" N-BK7 Broadband Precision Window, AR Coated: 650 - 1050 nm, t = 1 mm
9. Ø1/2" Harmonic Beamsplitter, Reflects 355 nm, Transmits 532 nm and 1064 nm
10. Ø1/2" Harmonic Beamsplitter, Reflects 1064 nm, Transmits 532 nm
11. Ø2" Harmonic Beamsplitter, Reflects 266 nm and 355 nm, Transmits 532 nm and 1064 nm
12. CaF2 Equilateral Dispersive Prism, Uncoated, 25 mm
13. Ø1" Motorized Precision Rotation Stage (Metric) Bundle with DC Servo Motor Driver and Power Supply
14. 25 mm x 36 mm 50:50 UVFS Plate Beamsplitter, Coating: 350 - 1100 nm, t = 1 mm
15. f = 100.00 mm, H = 30.00 mm, L = 60.0 mm, N-BK7 Plano-Convex Cylindrical Lens, Antireflection Coating: 650- 1050 nm
16. Adjustable Collimation Adapter
17. f = 4.51 mm, NA = 0.55 FC/PC Fiber Collimation Pkg.
18. Ø1" Nd:YAG Mirror, 1047 - 1064 nm
19. Ø1" Broadband Dielectric Mirror, 400 - 750 nm, 10 Pack
20. Round-to-Linear Bundle, 7 x Ø200 µm Core Fibers, Low-OH, SMA, 2 m Long
21. Metric Beam Dump
22. 38.1mm Dia., Aluminum Coated, Aluminum Substrate Mirror

2. 구성

1. O-Band Booster Optical Amplifier, CWL = 1290 nm (Typ.), Butterfly Pkg, PMF, FC/APC



- Center Wavelength : 1290 nm
- Operating Current : 900 mA
- Optical 3 dB Bandwidth : 32dB
- TEC Current : 0.5A

2. 7" x 4" Lab Jack, 2.26" Vertical Travel, 75 lbs Load Capacity



- Tap : M6
- Vertical Travel : 15 mm

3. Fast-Change, SM1 Lens Tube Filter Holder for Filters



- Thread : SM1
- Filter size : 3.5 mm thick

4. 3500 μ L Macro Fluorescence Cuvette with Stopper, 2Pac



- Type : super micro, micro and macro 100uL
- Wavelength : UV fused

5. Ø1" Zero-Order Half-Wave Plate, SM1-Threaded Mount, 700-780 nm



- Material : Quartz
- Mounted Versions Available : YES
- Retardances Available : $1/4 \lambda$ and $1/2 \lambda$
- Coating : V-coating

6. Ø25.0 mm Premium Shortpass Filter, Cut-Off Wavelength: 700-800 nm



- Transmission Region : See Table Below to Right
- Transmission : >90% (Absolute)
- Cut-on or Cut-off Tolerance : <0.75% of Cut-off λ
- Surface Quality : 40-20 Scratch-Dig
- Thickness : 0.14" (3.5 mm)

7. Ø25.0 mm Premium Longpass Filter, Cut-On Wavelength: 700-800 nm



- Transmission Region : See Table Below to Left
- Surface Quality : 40-20 Scratch-Dig
- Substrate Material : UV Fused Silica

8. Ø1" N-BK7 Broadband Precision Window, AR Coated: 650 - 1050 nm, t = 1 mm



- Size : 1.00" (25.4 mm)
- Thickness : 1.0 mm
- Clear Aperture : >90% of Diameter
- Surface Quality : 20-10 Scratch-Dig

9. Ø1/2" Harmonic Beamsplitter, Reflects 355 nm, Transmits 532 nm and 1064 nm



- Clear Aperture : >80% of Diameter
- Surface Quality : 10-5 Scratch-Dig
- Wedge Angle : 30 arcmin

10. Ø1/2" Harmonic Beamsplitter, Reflects 1064 nm, Transmits 532 nm



- Surface Flatness : $\lambda/10$ @ 632.8 nm Over Clear Aperture
- Thickness Tolerance : ± 0.40 mm
- Wedge Tolerance : ± 10 arcmin

11. Ø2" Harmonic Beamsplitter, Reflects 266 nm and 355 nm, Transmits 532 nm and 1064 nm



- AOIa : 45°
- Description : Reflects Third and Fourth Harmonics
- Reflected Wavelengths : 266 nm and 355 nm

12. Ø2" Harmonic Beamsplitter, Reflects 266 nm and 355 nm, Transmits 532 nm and 1064 nm



- Material : CaF₂
- Surface Flatness @ 633 nm : $\lambda/2$
- Clear Aperture : 70%

13. Ø1" Motorized Precision Rotation Stage (Metric) Bundle with DC Servo Motor Driver and Power Supply



- Size : 25.4 mm
- Motor Drive Voltage : ± 12 to ± 15 V (Depending on Supply)
- Motor Drive Type : 8-bit Sign/Magnitude PWM

14. 25 mm x 36 mm 50:50 UVFS Plate Beamsplitter, Coating: 350 - 1100 nm, $t = 1$ mm



- Nominal Split Ratio (Reflected:Transmitted) : 50:50
- Size (L x H) : 36.0 mm x 25.0 mm
- Dimensional Tolerance : ± 0.1 mm
- Substrate : UV silica
- Surface Quality : 20-10 Scratch-Dig

15. $f = 100.00$ mm, $H = 30.00$ mm, $L = 60.0$ mm, N-BK7 Plano-Convex Cylindrical Lens, Antireflection Coating: 650- 1050 nm



- Center Thickness : 5.2 mm
- Edge Thickness : 3.0 mm
- Back Focal Length : 96.6 mm

16. Adjustable Collimation Adapter



- Coating: 350 - 700 nm
- Adapter : $\varnothing 1$ " Lens

17. $f = 4.51$ mm, $NA = 0.55$ FC/PC Fiber Collimation Pkg.



- Lens AR Coating : 650 - 1050 nm
- Waist Distance : 4.12 mm
- Full-Angle Divergence : $0.06 \pm 0.01 / -0.00^\circ$
- NA : 0.55

18. Ø1" Nd:YAG Mirror, 1047 - 1064 nm



- Angle $0 \sim 45^\circ$
- Material : UV silica

19. Ø1" Broadband Dielectric Mirror, 400 - 750 nm, 10 Pack



- Wavelength : VIS
- Diameter : 25 mm

20. Round-to-Linear Bundle, 7 x Ø200 μm Core Fibers, Low-OH, SMA, 2 m Long



- Hydroxyl Content : Low OH
- Wavelength Range : 400 - 2400 nm
- Linear End Fiber Dimensions : 1.55 mm x 0.23 mm

21. Metric Beam Dump



- Construction : Black Anodized Aluminum
- Aperture Size : 10 mm
- Length (mm) : 38.00
- Outer Diameter (mm) : 40.00 mm

22. 38.1mm Dia., Aluminum Coated, Aluminum Substrate Mirror



- Surface Flatness: : $\lambda / 4$ RMS
- Surface Quality: : 80-50
- Diameter (mm) : 38.10 +0.00/-0.38
- Coating : Protected Aluminum (400-1200 nm)
- Coating Type : Metal
- Type : Flat Mirror

3. 기타사항

가. 설치위치 : 경북 구미시 구미대로 350-27 3D디스플레이 부품소재실용화지원센터 106호

나. 설치개요 : 규격서의 조건에 맞는 광학 물품 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.

4. 기타조건

가. 납품기한 : 계약 후 30일 이내

나. 규격관련 문의사항 : 실감미디어연구센터 우성수 선임연구원(054-460-9092)