

## Fujian A-Star Photonics Inc.

Specialized in Projection Display, Optical Elements, Industrial Lens Assemblies, Crystals, Precision Optics & Photocommunication Components, is a high-tech manufacturer, which integrates R&D, manufacturing and selling.  
Approved by **ISO9001:2015**

## CAPABILITY

### Production Lines

Spherical Workshop  
Flat Workshop  
Infrared Workshop  
Crystal Workshop  
Coating Workshop  
Lens Assembly Workshop



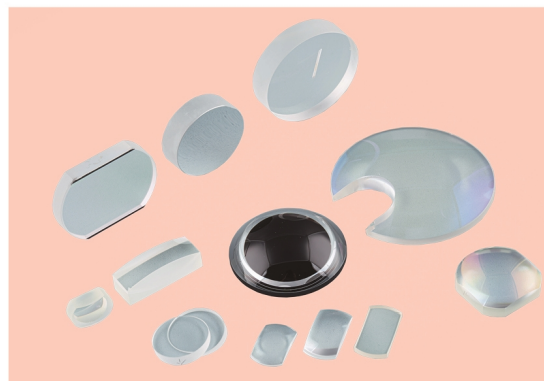
### Inspection Power

| Parameter       | Instrument                                |
|-----------------|-------------------------------------------|
| Flatness        | ZYGO Interferometer                       |
| Radius          | Trioptics-Curvature Radius Testing System |
| Centration      | Lens Measurement System                   |
| Tolerance       | Outside Micrometer, 2D, etc.              |
| Surface Quality | MIL-PRF-13830B, DIN-3140                  |
| Coating         | PerkinElmer-Lambda750, Agilent Cary 5000  |

## MAIN PRODUCTS

### Optical Lens

| Parameter           | General           | High Precision    |
|---------------------|-------------------|-------------------|
| Material            | Optical Glass     | Optical Glass     |
| Processing Range    | Φ3 - Φ210 mm      | Φ3 - Φ210 mm      |
| Size Tolerance      | +0/-0.1 mm        | +0/-0.01 mm       |
| Thickness Tolerance | ±0.05 mm          | ±0.005 mm         |
| Surface Quality     | 60/40             | 10/5              |
| Flatness            | N=3, Δ N=0.5      | N=0.5, Δ N=0.2    |
| Centration          | 3'                | 15"               |
| Clear Aperture      | > 90%             | 100%              |
| Coating             | AR, HR, FLC, etc. | AR, HR, FLC, etc. |



### Infrared Lens

| Parameter           | General             | High Precision      |
|---------------------|---------------------|---------------------|
| Material            | Si, ZnSe, IRG, etc. | Si, ZnSe, IRG, etc. |
| Processing Range    | Φ5 - Φ80 mm         | Φ5 - Φ80 mm         |
| Size Tolerance      | +0/-0.1 mm          | +0/-0.01 mm         |
| Thickness Tolerance | ±0.05 mm            | ±0.01 mm            |
| Surface Quality     | 60/40               | 10/5                |
| Flatness            | N=3, Δ N=0.5        | N=0.5, Δ N=0.3      |
| Centration          | 3'                  | 30"                 |
| Clear Aperture      | > 90%               | 100%                |
| Coating             | AR, HD, DLC         | AR, HD, DLC         |

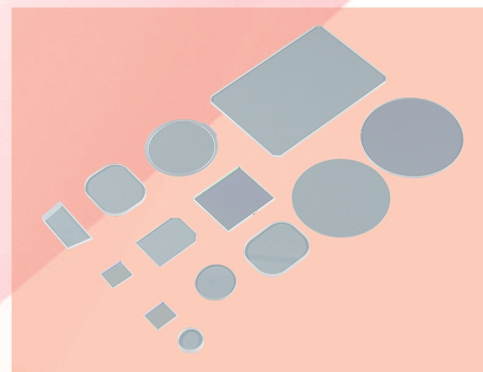


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## MAIN PRODUCTS

### Window

| Parameter           | General                                                   | High Precision                                            |
|---------------------|-----------------------------------------------------------|-----------------------------------------------------------|
| Material            | Optical Glass, CaF <sub>2</sub> , MgF <sub>2</sub> , etc. | Optical Glass, CaF <sub>2</sub> , MgF <sub>2</sub> , etc. |
| Processing Range    | Φ3 - Φ300 mm                                              | Φ3 - Φ300 mm                                              |
| Size Tolerance      | +0/-0.1 mm                                                | +0/-0.01 mm                                               |
| Thickness Tolerance | ±0.05 mm                                                  | ±0.005 mm                                                 |
| Surface Quality     | 60/40                                                     | 10/5                                                      |
| Flatness            | λ/2                                                       | λ/10                                                      |
| Parallelism         | 3"                                                        | 3"                                                        |
| Clear Aperture      | > 90%                                                     | 100%                                                      |
| Coating             | AR, PR, HR, FLC, etc.                                     | AR, PR, HR, FLC, etc.                                     |



### Waveplate

| Parameter             | Specification                                                                                    |
|-----------------------|--------------------------------------------------------------------------------------------------|
| Material              | Quartz, MgF <sub>2</sub> , etc.                                                                  |
| Processing Range      | 5x5 - 50.8x50.8 mm                                                                               |
| Size Tolerance        | +0/-0.1 mm                                                                                       |
| Retardation Tolerance | λ/300                                                                                            |
| Surface Quality       | 20/10                                                                                            |
| Wavefront Distortion  | λ/8@633 nm                                                                                       |
| Parallelism           | 3"                                                                                               |
| Clear Aperture        | > 90%                                                                                            |
| Coating               | AR coating                                                                                       |
| Type                  | Low-order Waveplate<br>Zero-order Waveplate<br>Dual-wavelength Waveplate<br>Achromatic Waveplate |

### Crystal

| Parameter            | Specification              |
|----------------------|----------------------------|
| Material             | BBO, LBO, etc.             |
| Processing Range     | 1x1 - 25x25 mm             |
| Size Tolerance       | ±0.1×±0.1×(L±0.005±0.3) mm |
| Surface Quality      | 20/10                      |
| Flatness             | λ/8@633 nm                 |
| Wavefront Distortion | λ/8@633 nm                 |
| Parallelism          | 30"                        |
| Clear Aperture       | > 90%                      |
| Coating              | AR, P-coating              |



### Optical Assembly

| Parameter           | Specification                                          |
|---------------------|--------------------------------------------------------|
| Format (inch)       | 1", 2/3", 1/2", 1/3"                                   |
| Focal Length (mm)   | Custom-made                                            |
| Mount               | C/CS                                                   |
| Aperture (D/f)      | F1.4~C                                                 |
| Pixel               | 2M, 5M, etc.                                           |
| Field Angle (D/H/V) | 2/3" D49.1°/H40.1°/V30.5°<br>1/2" D36.6°/H29.5°/V22.3° |
| Optical Distortion  | 2/3" -1.70% y=5.5 mm<br>1/2" -1.20% y=4 mm             |
| Operation           | Focus Manual<br>Iris Manual                            |