|  |  |
| --- | --- |
| Product name and model | Piezoelectric motor, high magnification, high quality focus motor |
| Main technical performance index of the product | Function: long range auto focus with high optical magnification lens |
| Compared with the old products, what are the improvements?(structure, material, technology, process, performance, use function) | With the continuous improvement of quality of display screen, photo camera pixel is rising, with monocular camera has the advantages of high pixel high quality camera optical magnification is high, but the volume is not easy to carry. Camera pixel mobile phone camera although have been upgraded, but there is still a gap with monocular camera. Multi camera camera and multi camera collocation of different optical magnification, high quality with high pixel camera can reach 52 million pixels of 5 optical zoom, volume to portable mobile phone. The new piezoelectric motor high rate high quality focus motor for this multi camera high optical magnification camera long stroke focus needs to develop micro pressure drive motor driven long stroke electric materials, support high quality high optical zoom magnification of multi camera products. The new product has the following improvements:

|  |  |  |  |
| --- | --- | --- | --- |
|  | Old products | New product | Utility |
| Texture of material | Voice coil type electromagnetic drive motor | The piezoelectric material drives the motor with a stroke of 1200μm | The moving range of the old product is limited, and the stroke is usually less than 350 M. The new product can travel 1200μm |
| Structure | Shrapnel suspension moving lens | The piezoelectric material pushes the drive rod and drives the lens to move | When the lens moves, the optical axis of the lens is stable, and the optical axis variation is small. |
| Design Technique | Electromagnetic drive force and suspension wire suspension force design | Design of corresponding structure for piezoelectric material drive | No magnetic interference, large thrust, can promote large-scale lens, improve the quality of photography, and provide long travel to support high optical rate lens focus |
| Performance | The trip is usually less than 350μm.The optical axis of the lens tilt variation 0.167The lens quality is less than 0.15g | Itinerary 1200μm.The optical axis of the lens tilt variation 0.14The lens quality is about 0.8g | Driving 150mm optical lens, providing 5 times optical zoom function |
| Use function | General camera autofocus | High optical rate lens long stroke focusing | Provides high optical zoom ratio |

 |