

IDG-4500-M-G-CL

4500 Series High-Resolution Industrial Inspection Camera



The IDG-4500-M-G-CL is a high resolution scientific CMOS camera equipped with a Camera Link interface. With the camera link interface, it will achieve 7fps@camera link medium and 10fps@camera link full interface. Because it uses global shutter, it has the advantage on detecting moving object such as FPD detection, semi-conductor inspection and industrial imaging.



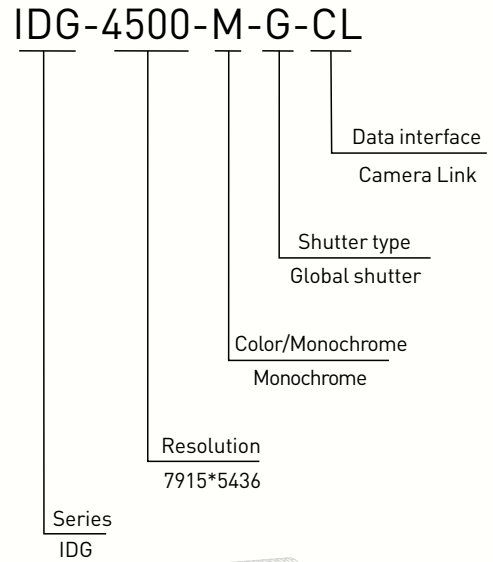
IDG-4500-M-G-CL

4500 Series High-Resolution & High-Speed Industrial Inspection Camera

■ Key features

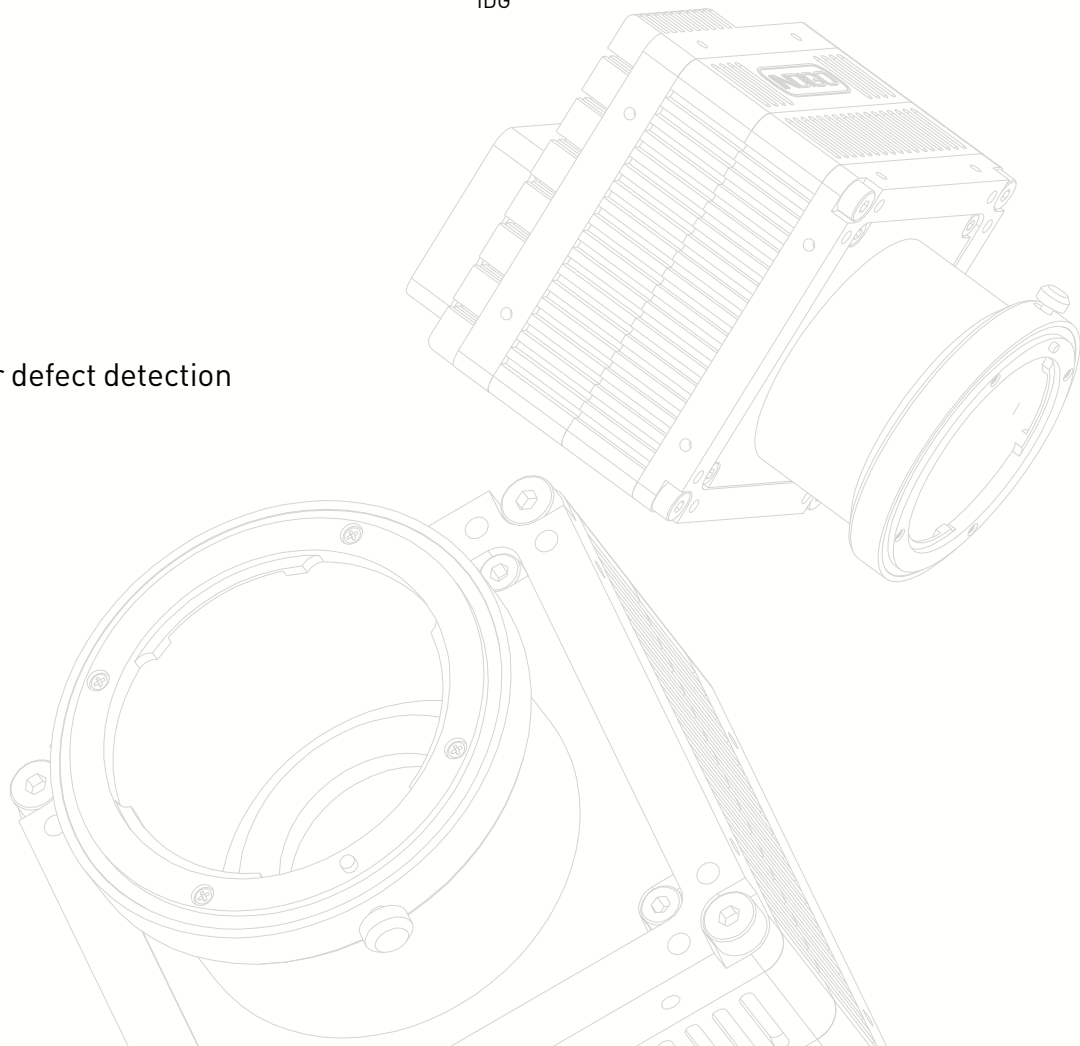
- High resolution (7915 x 5436)
- Global shutter
- Ultra low dark current
- Supports FFC, DPC correction
- Supports hardware trigger/Software trigger
- Supports Camera link V2.0 and GenICam standard

■ Ordering Scheme



■ Applications

- FPD inspection
- PCB and semiconductor defect detection
- Document scanning
- Aerial mapping



■ Specification

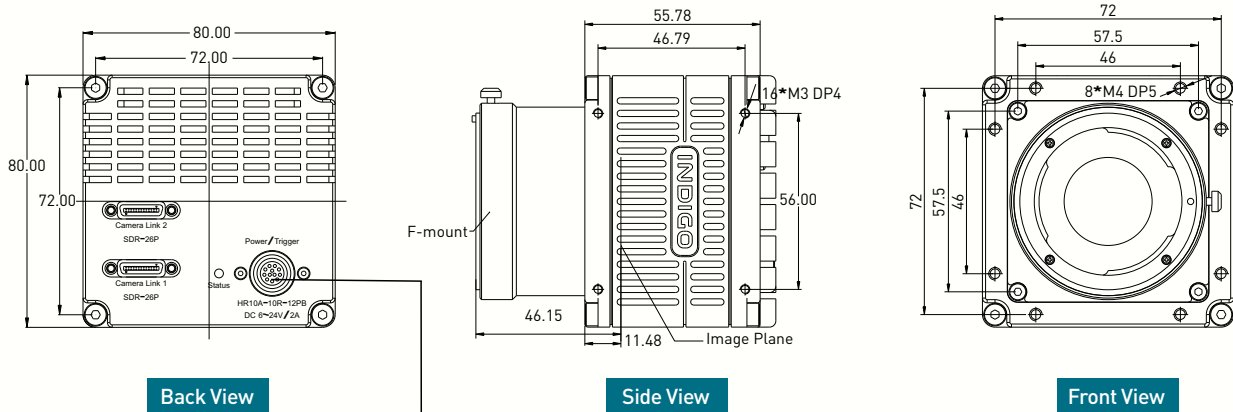
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|-------------------|--|
| Model | IDG-4500-M-G-CL |
| Sensor | GMAX0806 |
| Resolution | 7915 x 5436 |
| Sensor size | 1.7 inches |
| Pixel size | 28μm x 2.8μm |
| Sensor type | Scientific CMOS |
| Color/Monochrome | Monochrome |
| Shutter type | Global shutter |
| QE | 68%@480nm |
| Dynamic range | 68.3dB, 78dB(WDR mode) |
| Readout noise | 1.45e ⁻ |
| Dark current | <1e/s/pixel |
| Max frame speed | 7fps@CameraLink Medium; 10fps@CameraLink Full |
| Binning mode | 1 x 1, 2 x 2 |
| Exposure time | 48μs-10s step:12μs |
| Control | ROI, Exposure setting, Gain setting |
| Data bit | 8bit, 12bit |
| Image processing | FFC correction, DPC correction |
| Data interface | CameraLink Medium/CameraLink Full |
| Data transfer | 2 SDR-26 camera link |
| Camera link clock | 84MHz |
| Trigger mode | Free run mode, Standard |
| Output | High level, Low level, Exposure, Programmable pulse output |
| Optical mount | F mount, M58 |
| Power supply | 12~24V DC |
| Input signal | 1X (2.5-30V) |
| Output signal | 3X (2.5-30V) |
| RS232 | 1 |
| Power consumption | <7W |
| Dimensions | 80 x 80 x 107mm |
| Weight | 650g |
| Temperature | Operating: -20°C~60°C; Storage: -30°C~70°C |



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Mechanical design



Power supply and Trigger interface

Hirose Connector – HR10A-10R-12PB

Power – 1: Power GND 2: 12-24V DC

Trigger – 3: RS232 TXD; 4: RS232 RXD;

5: Digital GND; 6: Opto OUT 0; 7: Opto OUT 1; 8: Opto OUT 2;

9: Opto OUT GND; 10: N/A; 11: Opto IN+; 12: Opto IN-

