CS 8581QF
B/W Progressive Scan
Remote Head CCD Camera

- 1/3" Progressive Scan CCD
- Resolution 640 (H) x 480 (V) VGA
- High Frame Rate 133fps
- Partial Scan
- IEEE1394.b Interface (IIDC 1.31)
- Electronic Shutter
- Compact and Light Weight
- Cable Fixing to Any Direction Available
- Very Small Head (23 x 23 x 25.8 mm)
- Light Weight (head 24 gram)

Application
- Machine vision
- Factory automation
- Quality control
- Semi Con Inspection
Technical Data

Type CS 8581QF
Image sensor 1/3" Interline CCD
Video output pixels 640 (H) x 480 (V)
Unit pixel size 7.4 (H) x 7.4 (V) µm
Image Area 4.8 (H) x 3.6 (V) mm
Frame rate 133 fps
Sync system Internal
Illumination Standard: 2000lx, F 5.6
Minimum: 16lx (F 1.4) (GAIN MAX, approx. 50% video output)
Gain 0 - 12 dB (by 0.1 dB)
Gamma correction Fixed at 1.0
Image Buffer 5 frames (FIFO)
Power source +8V to +30VDC (supplied via the IEEE1394 cable)
Power consumption Approx. 333mA

Interface spec
Interface IEEE Std.1394.b-2002, bilingual mode
Transfer rate 800 Mbps
Video mode Format _7 Mode_0; Scaleable mode Mono 8 Bit
Format _7 Mode_1; Draft mode Mono 8 Bit
Protocol Complaint with IIDC1394-based Digital Camera Specification Ver.1.31

Trigger spec
Input level LOW level: 0-0.5V(p-p), HIGH level: 2-5V(p-p)
Capture timing Rising edge detection
Pulse width Minimum 2µs, Maximum 100µs

Electronic shutter spec
Normal Shutter Set via the IEEE1394 interface
RTS (Random Trigger Shutter) Set via the IEEE1394 interface
Exposure time Fix mode: 1/133s, 1/250s, 1/500s, 1/1.000s, 1/2.000s, 1/4.000s, 1/10.000s, 1/20.000s
32 Bit floating-point format mode: 20µs ~2s

Mechanical spec
External dimension Head: 23 x 23 x 25.8 mm
CCU: 140(W) x 28(H) x 90(D) mm
Weight Head: Approx. 24g (without cable)
CCU: Approx. 250g
Lens mount Special Mount M10.5, P0.5

Ambient condition
Operation -5°C to 45°C / Humidity 10% to 90% (no condensing)
Guaranteed Performance 0°C to 40°C / Humidity 30% to 90% (no condensing)
Regulations EMI: Conform to EN61000-6-4
EMS: Conform to EN61000-6-2

Quantum Efficiency
Monochrome with Microlenslets Quantum Efficiency

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<tr>
<th>Wavelength (nm)</th>
<th>Absolute Quantum Efficiency</th>
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<tr>
<td>300</td>
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Measured with clear cover glass