

❖ TM-9730 CL / TMC-9730 CL Progressive Scan CCD



- *2/3" progressive scan IT CCD imager (KAI-0373)*
- *768(H) x 484(V) @ 30 fps*
- *Large 11.6 x 13.6 μ m pixels for high dynamic range and NIR sensitivity*
- *Small 44.5 x 44.5 x 68 mm housing*
- *GUI or serial commands for digital control of all camera functions*
- *Built in LUT provides maximum image contrast & dynamic range*
- *Configurable design – select from a wide range of options including AEC, blemish compensation, UV, analog frame buffer, and more*
- *Monochrome or color*

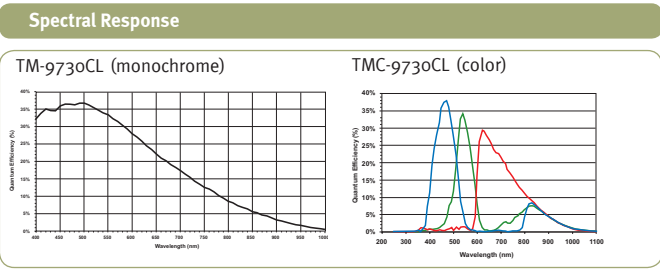


Specifications for TM-9730CL/TMC-9730CL

| Specifications | | TM-9730CL/TMC-9730CL |
|------------------------|---------------------|---|
| Sensor | | 2/3" progressive scan IT CCD |
| Active area | | 8.9mm x 6.6mm |
| Active pixels | | 768 (H) x 484 (V) |
| Cell size | | 11.6 μm x 13.6 μm |
| Readout modes | Digital Analog | 768 (H) x 484 (V) 570 TV lines (H) x 484 TV lines (V) |
| Synchronization | | Internal/External auto switch VD= 30 Hz HD= 15.734 kHz ± 5% |
| Pixel clock | | 14.318 MHz |
| S/N ratio | | >54 dB |
| Sensitivity | Monochrome Color | 0.09 lux f=1.4 (no shutter) @ 30 fps, 0.55 lux f=1.4 (no shutter) @ 30 fps |
| Video output | Analog Digital | 1.0 Vp-p, 75 Ω 8-bit Camera Link |
| Color | (TMC-9730CL only) | Raw Bayer output for host-based interpolation |
| Gamma | | Programmable LUT (Gamma 1.0 std) |
| Shutter speed | | 1/30 to 1/31,500 in 10 steps |
| Lens mount | | C-mount |
| Power | | 12V DC ± 10%, 330 mA (typical at 25° C) |
| Operating temperature | | -10° C to 50° C |
| Vibration | | 7 Grms (10 Hz to 2000 Hz) Random |
| Shock | | 70 G, 11 ms, half-sine |
| Dimensions (H x W x L) | | 44.5 mm x 44.5 mm x 68 mm |
| Weight | | 171 g (without tripod) |

| Shutter Speed | | | |
|---------------|-------|---|----------|
| 0 | 1/30 | 5 | 1/1,000 |
| 1 | 1/60 | 6 | 1/2,100 |
| 2 | 1/125 | 7 | 1/4,500 |
| 3 | 1/250 | 8 | 1/10,500 |
| 4 | 1/500 | 9 | 1/31,500 |

| Ordering Information | |
|--|---|
| Camera | |
| Lead Processing | TM-9730CL (mono), TMC-9730CL (color) |
| RoHS Compliant | RM-9730CL (mono), RMC-9730CL (color) |
| Optional Functions | |
| Auto Level Control (ALC) | OP1-5 |
| Imager Blemish Map | OP2-1 |
| Blemish compensation | OP2-5 |
| Ultraviolet Imager | OP21-UV (monochrome only) |
| Extended temperature -40°C to +65°C | OP22-5-1 (reduced performance may occur) |
| Conformal coat | OP22-5-5 |
| Analog frame buffer for RS-170 video conversion for video standard equipment | OP27-1 |
| NTSC | OP27-2 |
| NTSC Y/C | OP27-3 |
| Optional Accessories (must be ordered separately) | |
| I/O | 26CL-02-26 (2m) |
| Power Cable | 12P-02S |
| Power Supply | PD-12UUP (includes power connector) |



Connector Pin-out

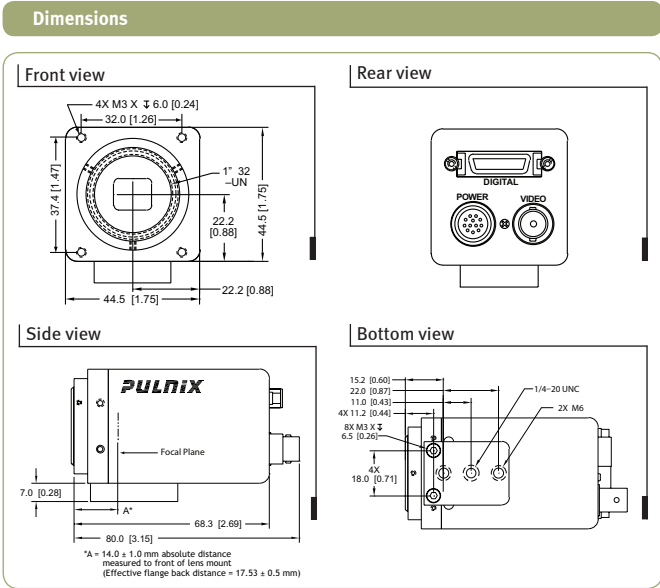
MDR 26-Pin Connector

| Pin # | Description | Pin# | Description | Pin # | Description |
|-------|--------------|------|--------------|-------|--------------|
| 1 | GND (Shield) | 10 | CC2+ | 19 | X3+ |
| 2 | X0- | 11 | CC3- | 20 | SerTC- |
| 3 | X1- | 12 | CC4+ | 21 | SerTFG+ |
| 4 | X2- | 13 | GND (Shield) | 22 | CC1+ |
| 5 | Xclk- | 14 | GND (Shield) | 23 | CC2- |
| 6 | C3- | 15 | C0+ | 24 | CC3+ |
| 7 | SerTC+ | 16 | X1+ | 25 | CC4- |
| 8 | SerTFG- | 17 | X2+ | 26 | GND (Shield) |
| 9 | CC1- | 18 | Xclk+ | | |

12-Pin Connector

| | | | |
|---|---------------|----|-------|
| 1 | GND | 7 | VD in |
| 2 | +12V DC | 8 | NC |
| 3 | GND (analog) | 9 | HD in |
| 4 | Video out | 10 | NC/Y* |
| 5 | GND (digital) | 11 | NC |
| 6 | NC/VINIT in | 12 | NC/C* |

*NTSC Y/C, OP27-3



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