The back-illuminated CCD in the ML4710 has exceptionally high quantum efficiency. Larger pixels provide deep dynamic range and gather more light for improved signal-to-noise. Available with midband, broadband, or UV coating on the sensor.

### Technical Data

- **Sensor Type**: Back Illuminated CCD
- **Sensor**: e2v CCD47-10
- **Active Pixels**: 1024 x 1024
- **Pixel Size (microns)**: 13 x 13 µm
- **Imaging Area (Diagonal)**: 13.3 X 13.3 mm (18.8 mm)
- **Full Well Capacity**: 100000 electrons
- **Typical Readout Noise**: 10e- @ 700 kHz; 17e- @ 2 MHz
- **Typical Gain**: 1.3e- / ADU
- **Dynamic Range**: 79.7 dB
- **Anti-Blooming**: None
- **Cooling Method**: Air (Optional liquid)
- **Max. Cooling (Air)**: 60°C below ambient
- **Temperature Stability**: 0.1°C
- **Dark Current (typical)**: 0.1 eps at -40°C
- **Interface**: USB 2.0
- **Digitization Clock**: 700 kHz and 2 MHz digitization
- **Data Bit Depth**: 16 bit
- **Non-Linearity**: <1%
- **Channels**: 1
- **Shutter**: 25mm; Optional 45mm
- **Lens Mount**: Nikon or Canon mount
- **Subarray Readout**: Standard
- **External Trigger In/Out**: Standard
- **SDK / Software**: USB2 / FLIGrab
- **Weight**: 2.8 lbs (1.2 kg)
- **Environment**: -30°C to 45°C | 10% - 90% Relative Humidity
- **Power**: 12V (100-240V AC to 12V DC power supply included). With TEC off: <1A.

### Absolute Quantum Efficiency

See [www.flicamera.com](http://www.flicamera.com) for alternate configurations.