

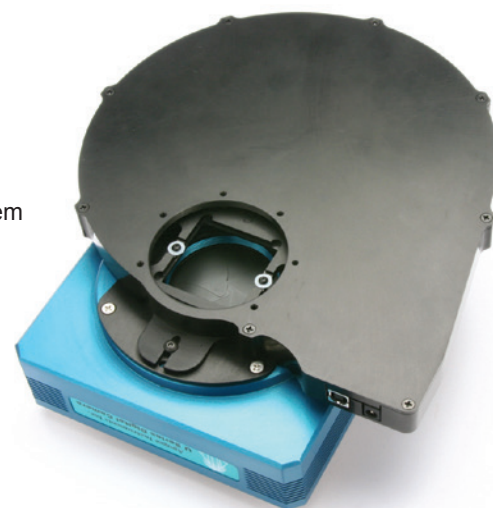
DESCRIPTION

The F29050 represents the next step in the evolution of the Alta line of cameras with faster readout speeds. The Alta F29050 has a 29-megapixel interline transfer sensor with high quantum efficiency. The camera is available with a monochrome sensor (F29050) or color (F29050C) sensor with a Bayer mosaic. Low noise and small pixels are ideal for OEM applications, biological and physical sciences. All Alta systems are backed by a 2 year warranty on the camera and lifetime warranty on the CCD chamber integrity.



SYSTEM FEATURES

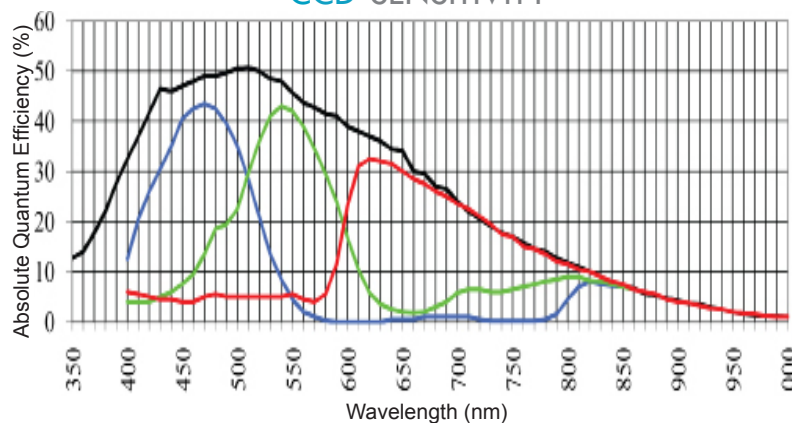
- 1 to 8 MHz 16-Bit digitization
- 32 MByte camera memory
- Field upgradeable firmware
- Dual channel support to 16MHz
- Subarray readout and fast sequencing modes
- 32/64 bit ActiveX drivers included with every system
- Programmable cooling to 50°C below ambient
 - General purpose programmable I/O port
 - Adjustable fan speed for low/zero vibration
 - Programmable status indicators
- AR coated silica windows
- Moisture free chambers
 - Liquid cooling option
- Precision locking filter wheels optional



CCD SPECIFICATIONS

CCD	Kodak KAI-29050
Array Size (pixels)	6576 x 4384
Pixel Size	5.5 x 5.5 microns
Imaging Area	36 x 24mm (872mm ²)
Imaging Diagonal	43.5mm
Linear Full Well (typical)	20K electrons
Dynamic Range	64 dB
QE at 400nm	33%
Peak QE (550nm)	50%
Anti-blooming	300X

CCD SENSITIVITY



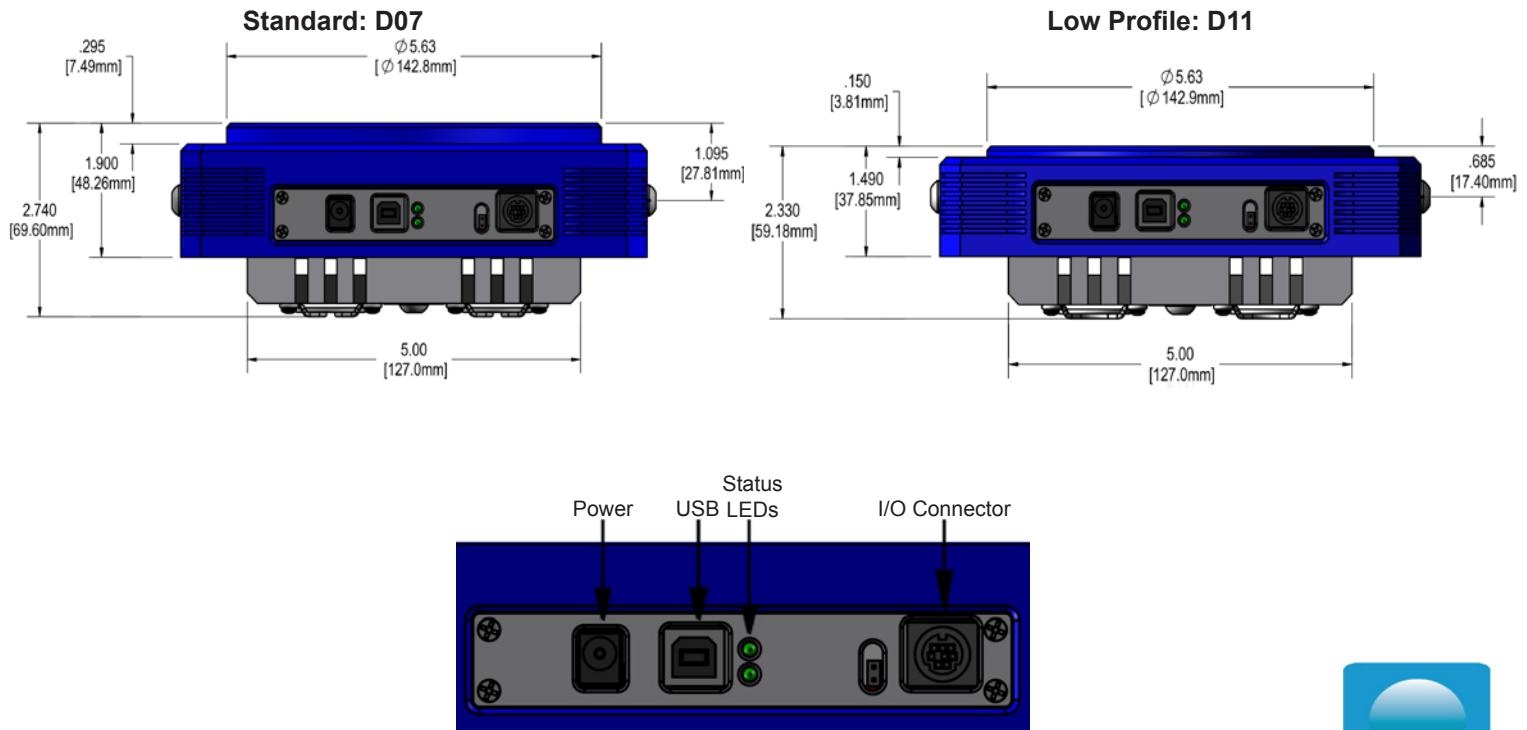
Imaging area of CCD

36 x 24mm

SYSTEM SPECIFICATIONS

PC Interface	USB 2.0	Temperature Stability	+/- 0.1°C
Max. Cable Length	5 meters between hubs, 5 hubs maximum (max. total of 30m); or up to 50m with iCon 2.0 Ranger extender	Operating Environment	-25° to 40°C. Relative humidity: 10 to 90% non-condensing.
Digital Resolution	16 bits to 8 MHz	Power	40W maximum power with shutter open and cooling maximum. AC/DC "brick" supply with int'l AC input plug (100-240V, 50-60Hz). Alternate 12V input from user's source.
System Noise (typical)	6 e- RMS at 3 MHz	Remote Triggering	LVTTTL input allows exposure to start within 25 microseconds of rising edge of trigger.
Pixel Binning	1 x 1 to 8 x 6132 on chip	Camera Head Size	Standard: D07. Low Profile: D11. Aluminum, hard blue anodized. 7"x7"x2.55" (17.8x17.8x6.48 cm). Weight: 4.2 lb.(1.9 kg).
Exposure Time	20 milliseconds to 183 minutes (2.56 microsecond increments)	Back Focal Distance	Standard: 1.005" (2.56 cm). Low Profile: 0.585" (1.5 cm). [optical]
Image Sequencing	1 to 65535 image sequences under software control	Mounting	5.125" bolt circle. 2.5" 24 TPI thread. Optional Nikon F-mount or Canon EOS/EF or FD mount.
Frame Sizes	Full frame, subframe, focus mode	Shutter	Standard: 63mm shutter. Low Profile: no shutter.
Cooling (typical)	Thermoelectric cooler with forced air. Maximum cooling up to 50°C below ambient temperature.		
Dark Current (typical)	0.15 e-/pixel/sec (-5°C)		

CONFIGURATION OPTIONS



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