

	Evolve	QuantEM 512SC	Cascade II:1024	Cascade 1K	Cascade 128+	CoolSnap HQ ²	CoolSnap ES ²	CoolSnap EZ	CoolSnap cf ²	CoolSNAP cf
Frame/Interline	frame	frame	frame	frame	frame	interline	interline	interline	interline	interline
EMCCD	yes	yes	yes	yes	yes	no	no	no	no	no
Peak QE	>90%	>90%	>90%	>60%	>90%	>60%	>60%	>60%	>40%	>40%
Resolution	512x512	512x512	1024x1024	1004x1002	128x128	1392x1040	1392x1040	1392x1040	1392x1040	1392x1040
Pixel size (mm)	16x16	16x16	13x13	8x8	24x24	6.45x6.45	6.45x6.45	6.45x6.45	4.65x4.65	4.65x4.65
Bit depth	16 ^a	16	16	16	16	14 ^b	12	12	12	12
Frame rate (frames/s)	33.7	31.5	8.5	9	510	11	10	10	10	11
Dark current (e ⁻ /pixel/second)	0.001	0.5	0.005	0.5	1	0.001	0.01	1	<1	<1
Full well capacity (ke ⁻)	200	200	80	30	250	16	13.5	12.3	10.2	9.7
IO Connectors	Full Set	Full Set	Full Set	Full Set	Full Set	Full Set	Expose Out	Expose Out	Expose Out	Expose Out

- a. The Evolve has a software selectable bit depth in the range of 8 to 16 bits
- b. The CoolSNAP HQ²'s bit depth depends on the interface: IEEE-1394a is 14 bits, LVDS is 12 bits