

COMPARISON OF CURRENT INTRAORAL CAMERA DESIGNS

Chart below compares intraoral cameras as of Mar. 2, '98, with emphasis on: (1) Easy, fast use; (2) Image sharpness & natural color; & (3) Ability to make 6 test photos rapidly with total patient comfort.

Grading Scale: 7 = Excellent
5 = Good
3 = Fair
1 = Poor

6 TEST PHOTOS:

- (1) Distal of upper last molar;
- (2) Buccal of upper last molar;
- (3) Lower lingual cuspid-to-cuspid;
- (4) Full lower arch;
- (5) Full face;
- (6) Bitewing x-ray on viewer.

EXAMPLE PHOTOS

Camera	Cost	Criteria for Columns A - I									Observations	Overall Grade (Mean of A-I)	
		A	B	C	D	E	F	G	H	I			
1- Concept III (Control) Dentsply New Image 760-930-9900	\$7,675 camera \$10,270 system	5	7	7	5	7	6	5	5	6	1. Single lens takes all 6 test photos but requires focusing. 2. Camera module with docking station concept. 3. Handpiece shape allows superior accessibility.	4. Cart option has convenient on/off switch. 5. Handpiece can be immersed in disinfectant.	5.9
2- EasyOp II Henry Schein 516-843-5500	\$5,790 camera \$6,995 system	4	7	7	5	6	5	5	5	6	1. Single lens takes all 6 test photos but requires focusing. 2. Camera & built-in printer are portable by hand.	3. Cordless link to monitor. 4. Foot pedal design causes accidental prints.	5.6
3- ViperCam Dynamic Dental Systems 714-650-8522	\$4,995 camera \$6,995 system	4	7	7	5	7	5	5	4	6	1. Single lens takes all 6 test photos but requires focusing.	2. Camera module with docking station concept. 3. Has excellent features at reasonable cost.	5.6
4- AcuCam Polo Dentsply New Image 760-930-9900	\$4,495 camera \$6,295 system	5	7	7	7	7	6	5	4	1	1. Built-in freeze frame makes printer optional. 2. Cart option has convenient on/off switch. 3. Metal sheath is inadequate for infection control.		5.4
5- Viola II American Electromedics 603-880-6300	\$4,500 camera \$7,500 system	3	7	7	5	5	5	5	6	6	1. Single lens takes all 6 test photos but requires focusing. 2. Built-in freeze frame makes printer optional. 3. Handpiece can be immersed in disinfectant.	4. Warranty for 3 years, rather than industry standard of 1 year. 5. Foot pedal design causes accidental prints.	5.4
6- VistaCam Omni IC Air Techniques 516-433-7676	\$6,595 camera \$10,162 system	5	7	7	6	6	3	7	6	1	1. Foot pedal design best in study. 2. Camera module with docking station concept. 3. Built-in freeze frame makes printer optional.	4. Cart option has convenient on/off switch.	5.3
7- EasyCam UltraLite II Henry Schein 516-843-5500	\$4,495 camera \$5,295 system	4	7	7	5	6	5	3	4	6	1. Single lens takes all 6 test photos but requires focusing. 2. Camera & built-in printer are portable by hand. 3. Has long print time (100 sec.).	4. Remote control must be moved between ops to remove unneeded printer display from monitor.	5.2
8- Reveal MLR & MLR+ Welch Allyn 315-685-4197	\$6,930 camera \$8,295 system	5	5	6	6	6	4	6	6	1	1. Camera module with docking station concept. 2. Handpiece can be immersed in disinfectant. 3. Add-on freeze frame module makes printer optional.	4. MLR+ image is rotated 90° on screen. 5. Foot pedal design causes accidental prints.	5.0
9- Reveal SLR Welch Allyn 315-685-4197	\$6,930 camera \$8,295 system	5	5	6	6	6	4	6	6	1	1. Camera module with docking station concept. 2. Handpiece can be immersed in disinfectant. 3. Add-on freeze frame module makes printer optional.	4. Intraoral lens only, cannot take 3 extraoral photos. 5. Foot pedal design causes accidental prints.	5.0
10- Stylus 2000 Cygnus Imaging 602-905-1500	\$6,700 camera \$8,784 system	5	7	7	4	7	4	6	4	1	1. Camera, with built-in freeze frame & monitor. 2. Most portable system in study.	3. Capture button on handpiece requires learning period, but foot control can be substituted.	5.0
11- TeliCam Elite Dental / Medical Diagnostics 805-381-2700	\$3,995 camera \$6,495 system	3	7	5	4	7	4	5	4	6	1. Single lens takes all 6 test photos but requires focusing.	2. Built-in freeze frame makes printer optional.	5.0
12- UltraCam UltraCam 972-353-6500	\$6,818 camera \$9,840 system	4	4	5	5	6	5	5	5	6	1. Single lens takes all 6 test photos but requires focusing. 2. Built-in freeze frame with 4 full screen memories makes printer optional.	3. Capture & print controls on handpiece require learning period, foot pedal optional. 4. Sheath design best in study, when plastic barrier added. 5. Wall bracket docking station.	5.0
13- OralVision 6000 Cygnus Imaging 602-905-1500	\$3,999 camera \$6,955 system	5	5	6	6	6	4	6	5	1	1. Handpiece swivel reduces cord drag. 2. Camera module with docking station concept. 3. Add-on freeze frame module makes printer optional.	4. Metal sheath is inadequate for infection control.	4.9

CRITERIA FOR COLUMNS A - I

6. CRA CONCLUSIONS:

All cameras tested above produce clinically acceptable intraoral images, & all have some problem areas. Concept III has best combination of ease of use, excellent image quality, & ability to make all 6 test photos rapidly with total patient comfort. However, ViperCam makes all 6 test photos with comparable image quality, at less cost, but lacks some convenience features. Criteria of this report separate cameras as follows:

EASIEST, FASTEST

AcuCam Polo
 Concept III
 Reveal
 Stylus 2000
 VistaCam Omni

LEAST EXPENSIVE

AcuCam Polo
 EasyCam UltraLite II
 OralVision 6000
 TeliCam Elite

FACILITATES MULTI-OP

Concept III
 EasyCam
 UltraLite II
 EasyOp II
 Reveal
 Stylus 2000
 TeliCam Elite
 UltraCam
 ViperCam
 VistaCam Omni.

BEST IMAGE

Concept III
 AcuCam Polo
 ViperCam

SINGLE LENS MAKES

6 TEST PHOTOS

Concept III
 EasyCam UltraLite II
 EasyOp II
 TeliCam Elite
 UltraCam
 Viola II
 ViperCam