



End of Support Notice

February 3rd, 2009

Dear DCG Systems Customer,

This letter is to notify you that DCG Systems will discontinue support of the Princeton Instruments RTE series CCD cameras on April 30, 2009.

The following Princeton Instruments RTE CCD Camera models are affected by this notification:

- RTE/CCD-1317-K
- RTE/CCD-1401-K
- 7218-0007

Systems potentially using these cameras:

All legacy Hypervision emission microscopy tools, including:

- BEAMS
- BEAMS Jr.
- BEAMS MerCad
- BEAMS TriVision
- BEAMS DEMI
- BEAMS iDEMI
- DEMI MerCad
- PTF1

Background : Princeton Instruments ceased production of their RTE series of CCD cameras in 2003. Their decision was driven by the fact that the Eastman Kodak Company had discontinued (without substitution or replacement) the manufacture of their "KAF1401" line of CCD arrays around which these cameras were designed.

Princeton and DCG Systems have worked diligently to maximize the service life of these cameras during the past five years, but now we find that we can no longer economically or practically continue to provide support. The last of the KAF1401 arrays have been consumed and repair volume has become too small to maintain technical resources for diagnosis and repair.

Transition plan:

DCG Systems will terminate the support for these cameras on April 30, 2009. Until then, DCG Systems will provide best effort support for these cameras including camera electronics, shutter repair, and vacuum restoration. However, any repairs or vacuum restoration done will be “as-is” basis and without any warranty. This is due to the age and fragile nature of the CCD array. It is also possible that the CCD array may cease to function or show optical or electrical artifacts after pump-down.

If your system is in good working order, we encourage you to schedule an on-site evaluation, PM or vacuum service before April 30, 2009 in order to maximize its service life.

Alternative options:

Should your CCD camera needs repair after April 30, 2009 or is determined un-repairable today, there is an alternative new camera that we are able to offer as a replacement. The new CCD camera comes in two different performance classes as below;

- Pixis 1024F High Resolution CCD upgrade kit \$68,750.00
- Pixis 1024BR Back Illuminated CCD upgrade kit \$98,250.00

Either CCD camera upgrade kit comes complete with a new CCD camera, upgraded BEAMS application software, upgraded Suss Prober Bench firmware and on-site installation services.

If your legacy (Hypervision) BEAMS system is not equipped with the current production version of control electronics (known as “Version 7” by both Hypervision and DCG Systems), it may require additional hardware and software upgrade as below.

- Version 7 Upgrade kit \$37,500.00

More detailed technical information and configurations of the above options are available.

In order to help our customers plan better for the future expenses, we are pleased to offer a **one time discount of 17.5%** for the purchase orders placed for the above kits before June 30, 2009.

More upgrade paths to your BEAMS:

In addition to the replacement of the old CCD camera, we are also now offering significant upgrade paths to your old BEAMS systems. Technical information and the pricing information will be available upon request.

For more information on these alternative options and also for any questions on the CCD support issues, please contact your local DCG Systems service personnel.

Best Regards,



Ron Stevens
DCG Systems World Wide Customer Support
45900 Northport Loop E.
Fremont, CA 94538
480-225-3089

Support Contacts

Please use the following contacts to request further information or call DCG Customer Support at 1-510-897-6883 or 1-877-623-8497 and request a call-back regarding BEAMS upgrade and end of support.

- Asia
 - Tony Chen, Regional Customer Service Manager;
 - tony_chen@dcgsystems.com
- NAM East including TX, NM, AZ and Canada:
 - Brian Pollock, Regional Customer Service Manager;
 - brian_pollock@dcgsystems.com
- NAM-West including CO:
 - John Page, Regional Customer Service Manager;
 - john_page@dcgsystems.com
- Europe:
 - Yvan Pfefer, SECTOR Technologies
 - yvan.pfefer@sector-technologies.com

New CCD for BEAMS systems

Why upgrade with new CCD?

- Extend the BEAMS emission microscope system utilization by providing sustaining serviceability for the CCD-Pixis detector
 - Replaces the vendor discontinued CCD-RTE detectors
 - CCD 1024F/BR DCG; Service spares available
- Enhance the system performance by upgrading to a more reliable next generation CCD-Pixis detector with superior performance and reliability
 - Hermetically sealed dewar providing lifetime vacuum
 - Lower operating temperature providing lower detector dark current and lower read noise
 - Better sensitivity due to higher quantum efficiency
- Enable system scalability to support the Dual Camera or Tri-vision upgrade options
 - Provides upgrade path for CCD-to-MCT/InGaAs and LSM

New!

Specification	CCD-RTE	CCD-1024F	CCD-1024BR
CCD image sensor	KAF1401e; scientific grade: Indium Tin Oxide (ITO)	e2v CCD47-10; front illuminated, grade 1, AlMO	e2v CCD47-10; back illuminated deep depletion, grade 1, NIMO
Quantum Efficiency	10% @ λ 1.0 μ m	17% @ λ 1.0 μ m	42% @ λ 1.0 μ m
Dark current	1.0e-/p/s	0.001 e-/p/sec (typical); 0.003e-/p/sec (max)	0.02 e-/p/sec (typical); 0.05e-/p/sec (max)
CCD format	1317 x 1035; 6.8 x 6.8 μ m pixels	1024 x 1024; 13 x 13 μ m pixels	
Image size	9 x 7mm (1x)	13.3 x 13.3mm (1x)	
Linear full well	42,000e- (typical)	100,000e- (typical)	
Read noise	15 e-rms	3.6 e- rms (typical); 5.0 e- rms (max)	
Readout bits/speed	12 bits @ 1.4MHz	16bits; @ 2MHz	
Readout time	1x1 Binning: 1.40sec	1x1 Binning: 0.58sec	
Operating environment	0 to +40°C, 0 to 70% humidity	Non-condensing; +5 to +30°C	
Operating temperature	Temp: -20°C	Temp: -80°C	
Operating System	Window 85/NT	Windows 2000/XP; Linux	
Data Interface	PCI	USB2.0	
Detector Head	Detector Head and Power Supply	Compact one camera head. Lifetime vacuum	
Availability	Out of Production: 2003	Currently Available	

The package consists of ;

- CCD
 - 1024F; Front illuminated detector, or
 - 1024BR; Back Illuminated detector
- Industrial PC
 - Upgraded XP PC Operating system
 - Upgraded BEAMS Application software
 - Upgrades Suss Prober Bench firmware

For more details, please contact your local service manager.