



# Imagex™-nanoCCD Technical Datasheet

<b>Model Number:</b>	IMX-NM-3
<b>Sensor Type:</b>	Interline CCD 1/2" format-Monochrome
<b>Image Resolution:</b>	752 x 582 in 2 interlaced frames
<b>Spectral Sensitivity:</b>	Maximum@500nm, 62% of maximum@400nm, 93% of maximum@600nm, 62% of maximum@700nm, 32% of maximum@800nm
<b>Readout System:</b>	14-bit A/D Converter with Correlated Double Sampling
<b>Interface:</b>	USB 2.0
<b>Light Output Triggers:</b>	3 x TTL Outputs (Level 5V=ON 0V=off). BNC Socket.
<b>Nanosecond Delay Controllers:</b>	2 individually programmable 0-255 nsec delays with 1 nanosecond resolution on Lamp Outputs 1 and 2. Nanosecond delays can be controlled either from the supplied application software or from Micromanager Device Adaptor. Nanosecond Delays can also be controlled using the Programmer's Library
<b>Horizontal Binning:</b>	1 to 40 pixels 'On-chip' under software control
<b>Vertical Binning:</b>	1 to 40 pixels 'On-chip' under software control
<b>Lamp Trigger Frequency:</b>	10Hz to 100kHz
<b>Power Supply:</b>	24V DC >2Amp
<b>Full Frame Readout Time:</b>	c.0.4 seconds
<b>Minimum Gate Width:</b>	1 microsecond
<b>Tripod/Optical Mount:</b>	Standard 1/4 20 UNC mount
<b>Lens Mount:</b>	C-Mount
<b>Cooling System:</b>	Fan-assisted 3-Stage Peltier Cooler
<b>Cold Chamber:</b>	Sealed Neoprene/ABS Block system with Double Antireflection-coated windows.
<b>Operating System:</b>	Windows XP, Vista, Windows 7/8/10 operating Systems
<b>Gating Controls:</b>	Gate Trigger Frequency, Lamp Pulse Width, Gate Width, Gate Delay, Lamp Channel Multiplex Control
<b>Gating Control resolution:</b>	200nsec
<b>Gating Extinction Ratio (ON:OFF)</b>	>29,000:1 at 520nm
<b>Image Integration Time:</b>	>10seconds@100kHz (Limiting Integration Times are dependant on Gating Frequency)

*This product is a Class A Digital Device intended for Installation and use within a commercial, industrial or business environment. It is not intended for domestic/home use. This product has been tested to ensure compliance with the Federal Code of Regulation (CFR Part 15, Subpart B) for Unintentional Radiators. This Product is CE marked for sale within the EU and associated Free Trade Areas.*

#### **Standard Systems supplied with:**

- 1 x System Unit containing CCD, Delay Generators, Gating Circuitry, Lamp Trigger Units and Image readout system.
- 1 x Imagex Power Supply Box
- 1 x 4-Core Imagex Power Supply Box-to-Camera Main Unit Power Cable
- 1 x USB 2.0 Cable for computer connection.
- 1 x BNC to BNC Cable to connect a Light source.
- 1 x 24V Switched Mode Power Supply. (Customer must supply mains lead for local mains supply)
- 1 x Software Installation Disk
- 1 x Imagex User Manual

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