

# iNova

## PLA-Mx



### Multi-purpose camera

*From planetary imaging to autoguiding*

*Sony Exview ICX618ALA - 310Kpx Monochrome CCD Sensor*

#### Description

- New **Sony Exview ICX618ALA CCD sensor (640 x 480 pixel array)** with a very high quantum efficiency from the visible spectrum to the near infrared (IR) region.
- Ideally suited for **planetary high resolution imaging**, thanks to an excellent sensitivity from the visible spectrum to the near infrared (IR) region.
- Provides **2x2 binning (640 x 480)** to get a 11.2 $\mu$ m square pixel to be able to detect a faint star for **autoguiding**.
- **C-mount thread** (this standard allows users to take different kinds of adapters like 1.25" eyepiece holder, camera objective lens with step down ring, ...).



## Technical features

CCD Sensor	Sony Exview ICX618ALA 1/4"
CCD Matrix (L*H)	640*480
Pixel size	5.6µm x 5.6µm
Binning 2x2	✓
ROI (region of interest)	✓
A/D converter	10/12bit
Frame rate (8/12bit)	Up to 63 FPS at full resolution
Exposure time	From 0.1ms to infinity
Interface	USB2.0
Communication port	For filter wheel control, focusing motors control and telescope mount control (ASCOS V6)
File format	BMP, AVI (8bit), FITS (8/16 bit) and SER (8/16bit) which can be read directly with main softwares like RegiStax V6.1, Avistacker V2, AutoStakkert! V2
ASCOS	ASCOS V6 Plugin available and tested with PHDGuiding V1.14, AstroArt V4 & V5, MaximDL V5, Prism and all softwares using ASCOS protocol
Dimensions	50 x 50 x 40mm
Weight	170g (6 oz)

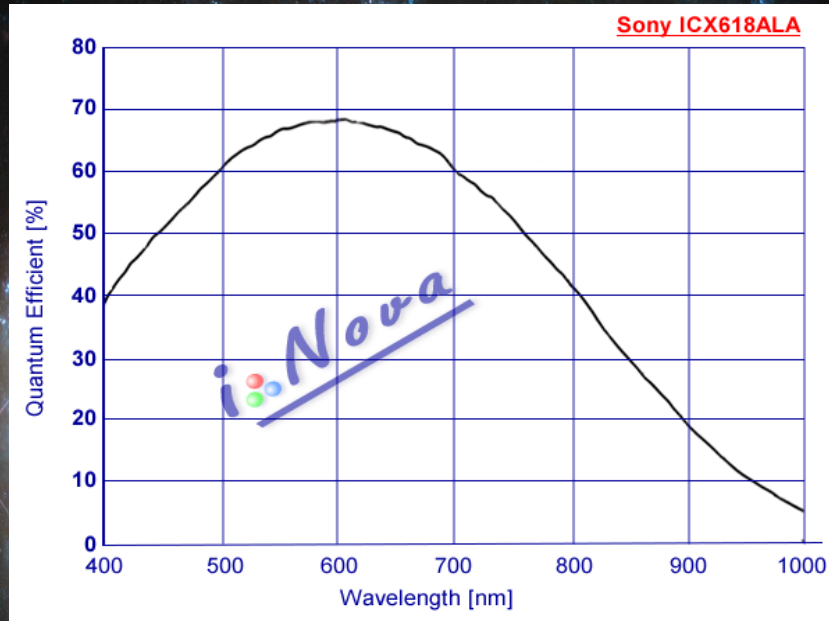


## Software and compatibility

Microsoft	Windows XP SP3, Vista, W7, 8, 8.1 x86/x64 Compliant with Microsoft Directshow. The SDK is available on request for programming (Microsoft C# or C++).
Linux	Linux drivers (INDI) are available.
MacOS	Drivers are not available but it is possible to run <i>i-Nova</i> cameras in <b>emulation Windows mode</b> with Bootcamp.



## Quantum efficiency



## Performance

Method to reduce readout noise with lower frequency:

Mode	Usage	Frequency
<b>Fast mode</b>	Planetary 8/12bit	24Mhz
<b>Normal mode</b>	Planetary 12bit	12Mhz
<b>Low speed mode</b>	Visual enhancement & Deepsky 12bit	6Mhz



*PLA-Mx Camera - Front side*

### Included accessories

- **C mount to 1.25"** adapter
- **USB2 cable** for PC connection
- **Software pack** including:
  - PLxCapture control and acquisition specific software and conversion format utility (video),
  - ASCOM plugin.

*New software releases are available for download from FTP site [www.inova-ccd.fr/download](http://www.inova-ccd.fr/download)*

### Options

- **Autoguiding cable RJ12 connector for ST4 port.**
- **Peltier cooling system kit** with or w/o temperature regulation.

### Recommended accessories

- **Motorised filter wheel** - 5 or 8 positions - provided with ASCOM plugin
- **Electronic viewfinder:** C/CS mount objective lens, FL from 2.1mm (150° fov) to 25mm (11° fov)
- **GPS module** with USB2.0 port
- **C mount to female T2** adapter



*PLA-Mx Camera - USB2.0 , ST4  
and TTL serial communication ports*

*i.Nova*

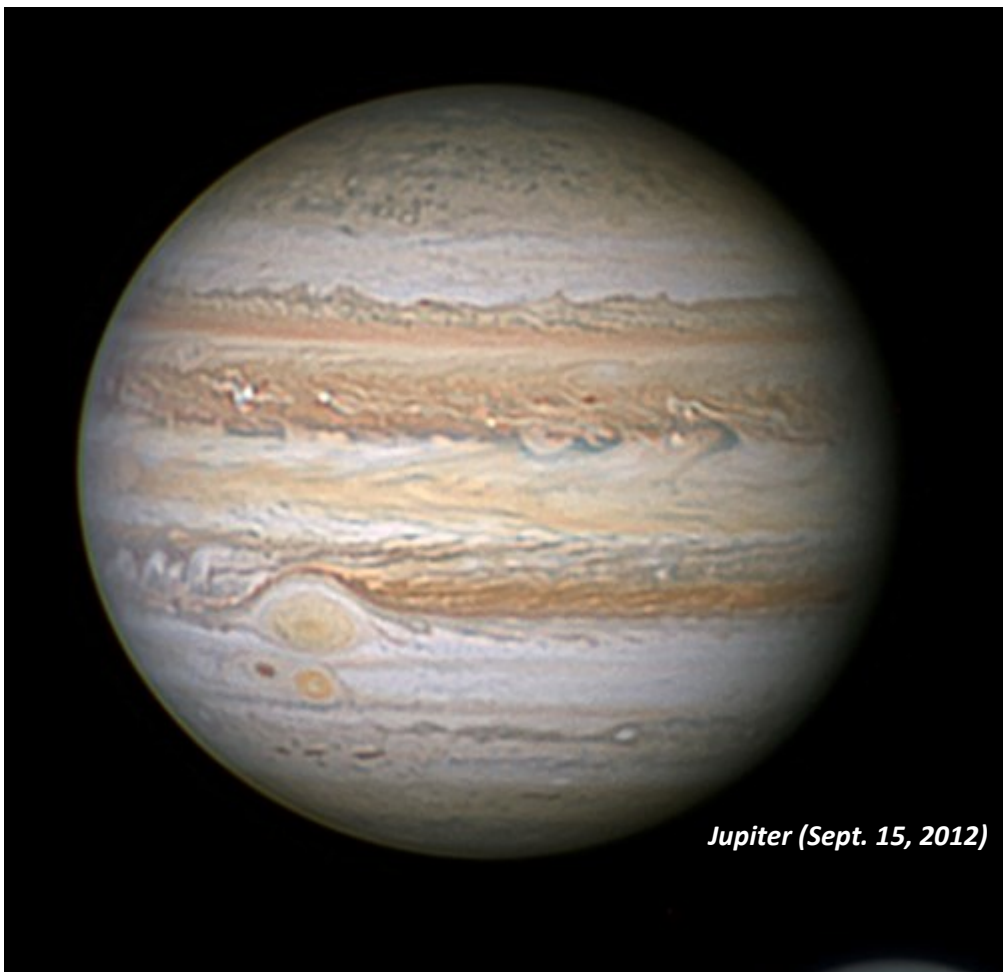


*Camera has a female Kodak thread socket*

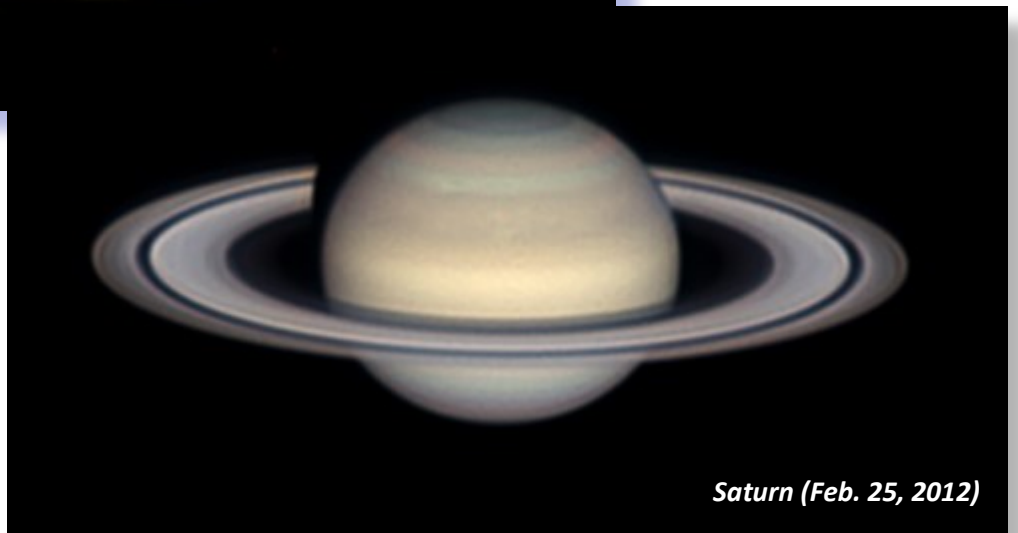


*Camera attached on an objective lens*

[Photo gallery with photos taken by users](#)



*Jupiter (Sept. 15, 2012)*



*Saturn (Feb. 25, 2012)*

i-Nova is a registered trademark of M42 Optic SARL in France and other countries.