i-Nova

CS-L Cooling system for PlxCam Series

Description

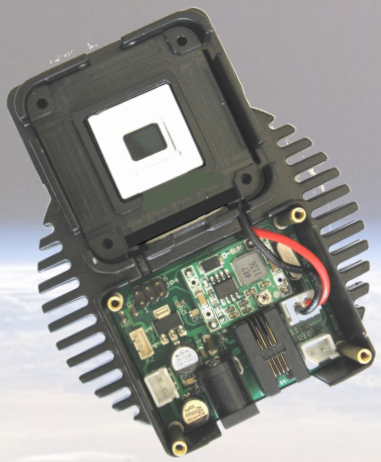
- This CS-L cooling system allows to **upgrade *i-Nova* cameras – PLxCam Series** and make them **perfect for long exposure**. With a Peltier module and control electronics, the **camera sensor temperature is lowered by 30°C (54°F)** when operating under ambient temperature conditions.
- **Reducing dramatically thermal noise**, this cooling system **allows long exposure during several minutes** to take pictures of deep sky objects.
- The **visual enhancement mode** takes also advantage of this cooling system, with an **increased S/N ratio** of the camera (which improves the quality of pictures).

- This CS-L cooling system is assembled entirely inhouse.
- Components of the cooling system are:
  - Peltier module TEC (maximum power: 5.7W),
  - Aluminium case that also serves as heat sink for TEC,
  - Electronic card with a microcontroller to manage the Peltier module,
  - Fan to improve heat dissipation.
- Requires an external power supply 12V DC – 2A (minimum).

M42 Optic Tel + 33 147 847 027 - contact@inova-ccd.com - www.inova-ccd.com

***Cooling system** mount on a PLB-Cx camera*

Front side of the new system



Cooling system kit

Technical features

Current consumption	Below 1A under 12V DC
Cooling	Temperature lowered by 30°C (54°F) at ambient temperature
Fan noise	Below 16 dB
Communication port	TTL serial communication port for temperature regulation (RJ9 4P4C connector)
Power supply	Male jack plug 5.5/2.1mm
Dimensions	95 x 75 x 55mm
Weight	170g (6 oz)

Options

- **Power supply 12V DC - 2A** (Cable length: 2m) with a female jack plug 5.5/2.1mm.
- For color camera (PLA-C2, PLB-C2, PLB-Cx), clear window can be replaced by an **IR cut filter**.
- **We can upgrade your system** (please contact us).
- *Upgrade to CS-E model (2-stage Peltier module with temperature regulation) – Available in September 2014*

M42 Optic Tel + 33 147 847 027 - contact@inova-ccd.com - www.inova-ccd.com

Themal noise comparison for a PLB-Mx camera with/without cooling system