

Rosel holding, which is part of the Rostec State Corporation, began the supply of universal television cameras UKK-1. New devices can function in conditions of low light and extreme temperatures, including Arctic regions.

The cameras are developed by the Central Research Institute of Electron and work in a wide range of electromagnetic spectrum – from ultraviolet to the near infrared radiation. They are intended for use in machine vision systems and research equipment.

The basis of the device was a highly sensitive matrix with the technology of backlight and enlarged pixels. This design allows Capture more light, providing high image resolution at a minimum noise level.

To work in extreme conditions, the camera is equipped with a thermoelectric cooler. The sensor is placed in a hermetic cermet case filled with xenon, which allows you to reach the temperature difference up to 40 degrees relative to heat sink.

As the General Director of the Central Research Institute of Electron Alexei Vyaznikov noted, cameras can be used in microscopy, astrophotography, bioluminescence studies and flaw detector. The first batch has already been sent to customers who confirmed the performance of the devices.