

## MSPO 2015: FIRST “AGAT” THERMAL VISION BINOCULARS MANUFACTURED BY PCO S.A.

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As it was announced last year by PCO S.A., the company is presenting its new NPL-1T thermal vision binoculars during the MSPO 23rd International Defence Industry Exhibition in Kielce. The mass production of the device, once an order from the Army is obtained, may be started this year.

PCO S.A. developed a prototype of the device based on a bolometric detector, with a resolution of 640x480 pixels.

When developing their new system, the PCO S.A. engineers used the solutions used in the SCT “Rubin” firearm optic (which is already classified as NATO equipment, with the NSN number: 5855-43-001-4710). These thermal vision firearm sights were ordered in April 2015 by the Polish Ministry of Defence. The order has an estimated value of more than PLN 88 million (covering 1099 examples), and the products are going to be delivered until 2018.

In case of the thermal vision binoculars, a new control and signal analysis system for the detector has been applied, along with the new image processing and control systems, with the latter one featuring an ergonomic keyboard. Power supply system is also brand new, in case of the binoculars. The whole system is contained in a user-friendly housing with a keyboard and a lens-mount which makes it possible to calibrate the optics.

The device consumes very little energy, only 1.4 Watts of power, which makes it possible to use the binoculars for long periods of time, up to several hours. Two OLED displays are used to present the image. Observation of these displays is easier, thanks to utilization of aspherical elements in the oculars, with wide view in the lens - there is no need to adjust the position of the lens axis.

The binoculars additionally offer an option of recording several images within its memory, along with time and GPS data, coming from an external GPS receiver. The whole device weight, along with the batteries, is ca. 1 kg.

Let us recall the fact that PCO, on 21st October last year, became a part of the Polish Armament Group. This happened in a process of consolidation of the Polish defence industry. The product range offered by the company includes night-vision and thermal vision observation systems and optronic devices.