

Auto-Gating (ATG) function was designed to improve the BSP feature to be faster and to keep the best resolution and contrast at all times. It is particularly suitable for Aviator's Night Vision goggles, operations in urban areas or for special operations.

ATG is a unique feature that operates constantly, electronically reducing the "duty cycle" of the photocathode voltage by very rapidly switching the voltage on and off. This maintains the optimum performance of the I<sup>2</sup> tube, continuously revealing mission critical details, safeguarding the I<sup>2</sup> tube from additional damage and protecting the user from temporary blindness.

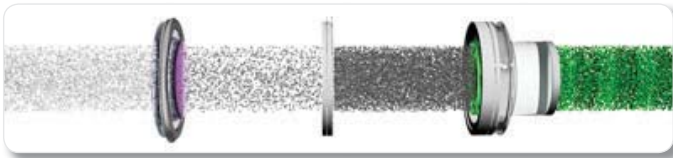


Illustration of tube without Auto-Gating

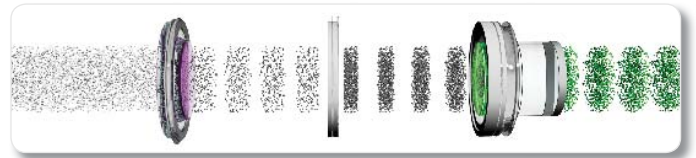


Illustration of tube with Auto-Gating

The benefits can easily be seen not only during day-night-day transitions, but also under dynamic lighting conditions when rapidly changing from low light to high light conditions (above 1 lx), such as sudden illumination of dark room.

PHOTONIS ATG allows the tube to maintain as much as 90% of the nominal MTF and resolution of the high light level, whereas standard tubes without Auto-Gating would drop to 10-20 lp/mm, which is less than 25% of the nominal MTF and resolution of the high light level.

A typical advantage of ATG is best felt when using a weapon sight which experiences a flame burst during shooting (see figures below showing pictures taken at the impact zone of a dropped bomb).

ATG would reduce the temporary blindness that a standard BSP tube would introduce, allowing them to continuously maintain "eyes on target".



Images of explosion with Auto-Gating



Images of explosion without Auto-Gating

ATG provides added safety for pilots when flying at low altitudes, and especially during takeoffs and landings. Pilots operating with night vision goggles are constantly subjected to dynamic light conditions when artificial light sources, such as from cities, interfere with their navigation by producing large halos that obstruct their field of view.