



## FUSION THERMAL/NIGHT VISION SYSTEM

## FIITS14 w/3A IIT

The FIITS system by ATN combines Image Intensification and Infrared Thermal Imaging technologies for night time low light and adverse weather conditions observation. This is achieved by combining an advanced image intensification system with a thermal imaging system.

The combination of the channels allows the user to take full advantage of both technologies by dichoptically creating a “Fused” image for enhanced night vision observation.

The results are a fused image that allows you the benefits and capabilities of both technologies. You will be able to detect both the Image Intensified Night Vision scene and the Thermal Imaging scene so you will not miss anything that you would have been unable to see by either technology separately.

The FIITS is lightweight, portable, and can be used as a handheld binocular or a dual eye goggle.

- High resolution imaging
- Compact, light weight and durable housing
- Head/helmet mountable for hands free usage
- High Quality optics
- “Fused” image for enhanced night vision observation
- Handheld binocular or a dual eye goggle usage
- Waterproof



HEAD MOUNT ASSEMBLY



HELMET MOUNT ASSEMBLY



FIITS14 SYSTEM COMPONENTS

Export Warning: These products are subject to one or more of the export control laws and regulations of the U.S. Government. Pending the model these products are under the control jurisdiction of either the US Department of State or the US Bureau of Industry and Security US Department of Commerce. Export without proper licensing or consent is strictly prohibited.

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## THERMAL SPECIFICATIONS

Magnification	1X
Objective Focal Length	25 mm
FOV	11° x 8°
Focus Range	from 1m to infinity
Focus Adjustment	Manual
Exit Pupil	14 mm
Eye Relief	25 mm
Detector Type	Uncooled Microbolometer
Spectral Response	7-14 $\mu$ m
Pixels	160 x 120
Pixel Size	30 x 30 $\mu$ m
Angular Resolution, mrad	1,2
Thermal Sensitivity	< 0,1°C
Range to Detect a Human	475 m
Output Format	Analog PAL / NTSC
Display	OLED matrix
Display Format	SVGA, 852 x 600 pxl
Color	Monochrome
Digital ZOOM	Fixed 2x (optional 5x)
Brightness Adjustment	Manual
Contrast Adjustment	Automatic
Available User Interfaces	From outside PC through USB interface
Power Supply	2 x 3V, 123Atype
Start-Up Time	< 3 sec
Operating Time w/one battery pack	4 hrs
External Power Supply	DC 6V, 500 mA
Operating Temperature Range	from -20°C to +50°C
Waterproof	Yes, up to 10 m submersion
Dimensions	195 x 78 x 100 mm
Weight (w/batteries)	0,74 kg

## NIGHT VISION SPECIFICATIONS

Magnification	1X
Lens System Element	F1.2, 25 mm
Exit Pupil	14 mm
Eye Relief	25 mm
Eye Use	Left or Right
FOV	40°
Range Of Focus	0,25 m to infinity
Diopter Adjustment	From -6 to +6
ABC- Automatic Brightness Control CUT-OFF To Protect Image Intensifier Tube	Yes
Bright Light Indicator	Yes
Controls	Digital
Infra-red Illuminator	Built-in Rotary Select - Flood & Spot
IR Illumination Range	20 meters
IR Indicator	Led On/ Battery Low
Weight w/ Battery	0.34 kg
Dimensions	120 x 49 x 69 mm
Environmental Rating	Waterproof 20 m, 1 hr.
Operation Temperature	-40 to +50°C
Storage Temperature	-50 to +70°C
Flip Up Headset w/ Automatic System Off	YES
Battery Life w/o IR ON	30 hrs. (AA), 60 hrs. (3 V, Lithium)
Battery Life w/ IR ON	30 hrs. (3 V, Lithium)
Power Supply	(1) 3 V Lithium, or (1) AA Alkaline
MIL-SPEC 810 Standards	Complies
Waterproof	20 m for 1 hr

## FUSION SYSTEM SPECIFICATIONS

Magnification	1X
Focus Adjustment	Manual
Eye Relief	25 mm
Dimensions	130 x 130 x 78 mm
Weight (w/batteries)	0,75 kg

\* Specifications are provided for informational purposes only. Actual values may vary

## TUBE SPECIFICATIONS

HIGH QUALITY 3A GEN IMAGE INTENSIFIER TUBE	
Photocathode Type	Thin Film GaAs
Generation	3
Resolution, lp/mm*	64-72
Signal to Noise Ratio*	26 Typical
Figure of Merit	1800 Typical
MTTF - Mean Time Before Failure, hours	10,000
Export	N/A for Export

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