



FUSION IMAGE INTENSIFICATION THERMAL SYSTEM **FIITS14**

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. The separate channels can be disengaged from one another and used individually as either a Night Vision or Thermal imaging monocular.



Thermal Channel

Fusion Image

Night Vision Channel

Features

- Hand held or head/helmet mountable
- Images from NV or TI channels can be used separately or dichoptically fused
- TI channel “video-out” feature can be used with optional USB adapter & software which allows to display thermal images on computer or use them for further transmission
- High Quality optics
- FIITS14 can be attached to the optional head gear/helmet mount for “hands free” operations
- Video/Image polarity selection, white-hot or black-hot for thermale image
- Waterproof
- One Year Warranty



Thermal Channel

Magnification	1X
Objective Focal Length	16 mm
FOV	11° x 8°
Focus Range	1m to infinity
Focus Adjustment	Manual
Exit Pupil	14mm
Eye Relief	25mm
Detector Type	Uncooled Microbolometer
Spectral Response	7-14 μ m
Pixels	160 x 120
Pixel Size	30 x 30 μ 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
Battery Life with one battery pack	4 hrs
External Power Supply	DC 6V, 500 mA
Operation Temperature	from -20°C to +50°C
Waterproof	Yes, up to 10m submersion
Dimensions	118 x 78 x 54 mm
Weight (w/batteries)	0,34 kg

Night Vision Channel

Magnification	1X
Focus Range	0.25 m to Infinity
Eye Relief	25 mm
Exit Pupil	14 mm
Dioptre Adjustment	± 4
Operation Temperature	-40 To +50°C
Storage Temperature	-50 To +70°C
Waterproof	Yes, 20 m for 1 h
Power Supply	one 3V, 123Atype
Battery Life	25 hours (AA, 1.5 V) 50 hours (Lithium, 123a, 3v)
Dimensions	125 X 49 X 69 mm
Weight (With Battery)	0.32 kg

Specification



- Night Vision Monocular
- Thermal Monocular
- 3 batteries CR123A type
- Video cable
- PC cable
- Manual
- Software CD
- Head mount
- Helmet mount
- Dual Bridge
- Dual Bridge for PVS7 head/helmet mount

