

ELF-FB 20

ENHANCED NIGHT VISION BINOCULAR GOGGLES

The ELF-FB 20 is a new-generation enhanced binocular fusion night vision device. Comprehensive upgrades are implemented in image intensifier tube compatibility, low light and infrared imaging quality, fusion algorithm, size, and weight, delivering enhanced night vision and threat recognition performance.

KEY FEATURES



LOW-LATENCY FUSION IMAGING

Latency of less than 30 ms



INTELLIGENT FUSION IMAGE ALGORITHM



EXCELLENT OPTICAL PERFORMANCE

Low distortion and chromatic aberration under low light imaging



ACCESSIBLE TO ATAK SYSTEM



LIGHTWEIGHT DESIGN

Whole unit weight of only 550 g

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TECHNICAL DATA

Optical General		Advanced Functions	
Magnification	1×	Image Fusion Modes	Highlight, Outline
Focus Range	250mm ~ +∞	Strong Light Protection	✓
Focal Length	27mm	Auto Power-off	Flip-up, Turn on side
FOV	40°	Brightness Control	✓
Image Intensifier Tube		Eyepiece	
Tube Type	GEN2+ / GEN3 (Optional)	Exit Pupil Distance	25mm
Compatibility Range	18mm (NWT、10160、11769)	Diopter	-4 ~ +2D
Phosphor	White/Green	Spacing	55~72mm
FOM	FOM1400/FOM1600/FOM1800/FOM2000	Physical	
Thermal Channel		Dimensions (W × H × D)	105mm×110mm×87mm
Resolution	640×512 pixels,12μm	Weight	<540g (no battery)
Frame Rate	60Hz	Mounting Interface	L4G24
FOV(H×V)	24°×20°	Power Supply	
Others		Battery Type	Battery Holder (2× 18650)
Screen	OLED,1280*1024	Battery life	8h (Fusion) / 80h (Night vision)
Compass	✓	Environmental	
External GPS	✓ (Optional)	Immersion	IP67

ACCESSORIES



Infrared Range Performance Human



Detection	1230m
Recognition	410m
Identification	210m

Infrared Range Performance Vehicle



Detection	1670m
Recognition	560m
Identification	280m

The calculation of these indicators is based on the target detectability division method defined in the Johnson criterion. The humanoid target is defined as 1.7m high and 0.5m wide, and the vehicle target as 2.3m by 2.3m. The calculations assume standard environmental conditions and are based on the sensor specifications listed in the product. Actual performance may vary due to environmental factors, atmospheric conditions, or operational settings.



HIGHLIGHT MODE



OUTLINE MODE