



# ENGEREK F

## FUSION DIGITAL NIGHT VISION BINOCULAR



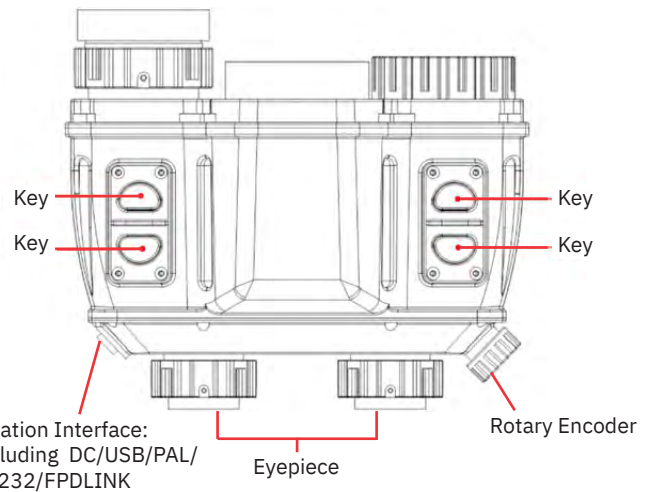
### ENGEREK F FUSION DIGITAL NIGHT VISION BINOCULAR

#### General Features

The advanced fusion sight digital night vision binoculars ENGEREK F is an integrated binocular fusion device capable of low-light and infrared observation, laser distance measurement and precise target positioning. This tool boasts super sensitivity and high reliability with the capability to operate effectively in both daylight and nocturnal settings. It provides clear and continuous imaging even under starlight conditions and scalable wireless transmission functionality for digital images. One of the standout features of this product is its ability to meld low-light and infrared images, leveraging the respective strengths of these two technologies in the realm of night vision, this results in superior image capture capabilities, offering unprecedented detail and clarity.

- 13 $\mu$ m large pixel, ultra-high sensitivity
- 1024x768 dual channel imaging
- Binocular OLED micro-display
- 4km laser ranging, 1535nm wavelength
- Multi-target relative position ranging
- Image storage and playback capability
- All weather use, suitable for various environments

Low Light Objective Lens





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Technical Specifications		
	Low light	Infrared
Image sensor dimension	1 inch	-
Spectral response waveband	400nm~1100nm	8μm ~14μm
Image resolution	1024×768	1024×768
Pixel size	13μm	12μm
Minimum illumination (No light compensation)	0.0001 Lx	-
OLED resolution	1024×768	
Frame rate	25Hz	
Optical Specifications		
Objective lens focal length	46mm	42.5mm
F/#	F1.2	F1.1
FOV	>16°×12°	
Exit pupil diameter	6mm	
Exit pupil distance	20mm	
Visual amplification	2×	
Objective focus	10m	
Diopter	-5D ~ +3D	
Laser Range Finder		
Wave length	1535nm (safe for human eyes)	
Maximum range	>4km (vehicle)	
Minimum range	<20m	
Ranging accuracy	±1m(RMS)	
Parameters		
Electronic compass azimuth	0°~360°	
Electronic compass pitch angle	-90°~90°	
Observation pattern	Low light/Infrared/Fusion/Color fusion	
Boot time	<4s	
Battery	Three 18650 rechargeable lithium batteries (voltage: 3.7V, capacity: 3000mAh)	
Max. continuous working period	>12hours	
Size	160×141×91 (mm)	
Extensible electrical interface	14-core aviation socket	
Protection class	IP67	
Weight (including batteries)	<900g (aviation aluminum)	
Environmental adaptation	Working: -20°~55° (can be extended to -40°~60°)	
	Storage: -25°~55° (can be extended to -45°~70°)	
DRI for Human	1805m (detection) /902m (recognition) /451m (identification)	3010m (detection) /1505m (recognition) /753m (identification)
DRI for Vehicle	3255m (detection) /1628m (recognition) /814m (identification)	4073m (detection) /2036m (recognition) /1018m (identification)