

# Head-Mounted Telescopes WLS-MDD Series



## Features:

WLS-MDD binocular night vision device is a high-performance pure military head-mounted night vision device, which is designed with reference to the current head-mounted night vision device PVS-31 in the United States. It is divided into two models: low-light version MDD1W and digital version MDD1.

Digital MDD1 has the characteristics of strong adaptability to ultra-low illumination environment, high imaging quality, multifunction, day and night use, electronic zoom, clear imaging, high cost performance, etc. It is very suitable for general military enthusiasts and outdoor enthusiasts at night.

The low-light version of MDD1W has the characteristics of large field of view, high definition, no distortion, light weight and high strength (the overall performance greatly exceeds the original US military products), which is an ideal choice for military night equipment.

WLS-MDN Specification			
Cataloge	WLS-MDD1W		WLS-MDD1
Flip Detection	Automatic detection		
Power Supply	Lithium battery (CR123x1)/CR23x4 External battery box		
Battery Voltage Range	2.6-4.2V		
Installation Method	Head-mounted (standard American helmet interface)		
Control Mode	ON/IR/AUTO		
Power Consumption	<0.1W	<1.2Wx2	
Battery Capacity	800-3200maH		
Battery Life	40-100H	0.5-3H	
Optical Magnification	1X		
Full field of view	50 +/-2 °	25+/-2°	
Parallelism of Optical Axis	<0.1°		
Image intensifier	Ultra-Second Generation/Third Generation Low Light Tube	Ultra-low illumination CMOS	
Light Passing Aperture	F1.18 22.5mm	F1.6 7.8mm	
Optical MTF	120LP/mm	160LP/mm	
Optical distortion	3% Max	0.5%Max	
Relative illuminance	>75%	>80%	
Optical Filming	Ultra-wideband multilayer optical antireflection film		
Focusing range	250mm-∞		
Focusing mode	Manual		
Distance of eyepiece exit pupil	30		
Aperture diameter of eyepiece	8mm	6mm	
Visual range	0 degree of vision (+/-5 degrees optional)		
Adjustment mode of target distance	Arbitrary continuous adjustable		
Range of eye distance adjustment	50-80mm		
Target spacing locking mode	Manual locking		
Frame rate			30-50Frame
Low illumination sensitivity			1x10 <sup>-4</sup> Lux
Image resolution ratio			1440P
Display resolution			480x480x3 OLED
SD card capacity			1-128GB High-speed card
Other functions			Video recording, GPS, WIFI, electronic compass
Secondary light source	850nm 20mW		
Applicable temperature	-40-- +55°C	-30-- +50°C	
Humidity	5%-95%		
IP	IP65/IP67		
Size	115x105x85	115x178x58	115x105x85 115x178x58
Weight	560G		430G

# Head-Mounted Telescope WLS-MS/MD Series



MSS Series



MDS Series



MDD Series

## Features:

MS/MD multifunctional low-light-level night vision instrument is a new product developed based on the latest photoelectric technology. The instrument adopts high performance second/third generation image intensifiers, and has excellent performance, small volume and weight. Light weight, clear imaging, simple operation and flexible use.

By replacing the objective lens (or connecting the multiplier lens) can change the magnification and other characteristics. The product is connected into binocular by a special binocular connecting piece. Barrel night-vision goggles can also be disassembled for use as monocular night-vision goggles. The night vision device is internally provided with Infrared auxiliary light source and automatic anti-glare protection system.

The product is practical and adaptable. It is used for military observation, border and coastal defense reconnaissance and public security in the night without illumination environment such as surveillance, evidence collection, customs anti-smuggling and so on.

WLS-MS/MD Specification			
Category	WLS-MSS	WLS-MDS	WLS-MDD
Image intensifier level	Super second generation (Third Generation)	Super second generation (Third Generation)	Super second generation (Third Generation)
Magnification	1X (3X/4X/5X)	1X	1X (3X/4X/5X)
Resolution	45-57 (51~57)	15-21 (18~25)	45-57 (51~57)
Cathode surface type	S25 (GaAs)	S25 (GaAs)	S25 (GaAs)
SNR (dB)	15-21 (18-25)	15-21 (18-25)	15-21 (18-25)
Optical sensitivity (μA/lm)	450-500 (500~600)	450-500 (500~600)	450-500 (500~600)
Fault-free time (h)	10,000	10,000	10,000
Field of view (Degree)	42+/-3	42+/-3	42+/-3
Observation distance (m)	180-220 (250~300)	180-220 (250~300)	180-220 (250~300)
Target differentiation	Built-in (optional)	65+/-5	65+/-5
Adjustment Range (Diopter)	+5/-5	+5/-5	+5/-5
Lens	F1.2, 25mm	F1.2, 25mm	F1.2, 25mm
Optical filming	Multilayer composite broadband ultra-vacuum ion antireflection film	Multilayer composite broadband ultra-vacuum ion antireflection film	Multilayer composite broadband ultra-vacuum ion antireflection film
Objective lens adjustment range (m)	0.25--∞	0.25--∞	0.25--∞
Automatic anti-glare	Highly sensitive, ultra fast, broadband detection	Highly sensitive, ultra fast, broadband detection	Highly sensitive, ultra fast, broadband detection
Flip detection	All-solid Non-contact Automatic Attitude Recognition	All-solid Non-contact Automatic Attitude Recognition	All-solid Non-contact Automatic Attitude Recognition
Product size (mm)	115x69x54	130x130x56	115x127x69
Product material	All aviation aluminum alloy	All aviation aluminum alloy	All aviation aluminum alloy
Product weight (g)	295	393	645
Supply voltage (V)	2.6-4.2V	2.6-4.2V	2.6-4.2V
Battery Type (V)	1 lithium battery	1 lithium battery	1 lithium battery
Continuous working hours	80(Turn off infrared) 40(Turn on infrared)	80(Turn off infrared) 40(Turn on infrared)	80(Turn off infrared) 40(Turn on infrared)
Operating temperature (°C)	-40/+50	-40/+50	-40/+50
Humidity	5%-98%	5%-98%	5%-98%
IP	IP65(IP67 optional)	IP65(IP67 optional)	IP65(IP67 optional)