

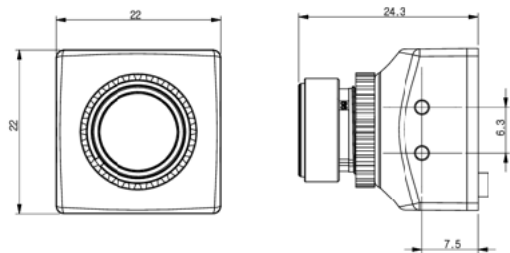
VND-1EMT



CORE ADVANTAGES

- **Ultra-low latency**, enabling real-time performance for AI vision, sports analytics, military systems, autonomous driving, and industrial automation
- **60 fps real-time video output** (NTSC 59.94 Hz / CVBS, RS-170) for **near zero-delay transmission** in mission-critical applications
- **HDR/WDR for extreme contrast scenes** — accurate detail retention against strong backlight and deep shadows
- **Superior low-light visibility** with enhanced noise reduction and true-to-life color reproduction
- **Wide power input range** (DC 4.5V – 20V) for robust and flexible system integration
- **Industrial-grade** temperature durability: **-40°C to +70°C**
- **Ultra-lightweight design and Size** — only **9g** (without bracket) and **22mm x 22mm** size, ideal for drones and compact mobile platforms

DIMENSIONS



SENSOR	
Image Size	Diagonal 6.09mm (Type 1/3") approx. 1.23MP, All Pixels
Total Number of Pixels	1312 (H) x 993 (V), 1.3MP
Number of Effective Pixels	1305 (H) x 977 (V), 1.27MP
Number of active Pixels	1297 (H) x 977 (V), 1.27MP
Number of recording pixels	1280 (H) x 960 (V), 1.23MP
Unit Cell Size	3.75 μm (H) x 3.75 μm (V)
Sensitivity	3839 Digit/lx/s
CAMERA	
Resolution	720 (H) x 480 (V)
Scanning System	Progressive Scan
S/N Ratio	More than 50dB (AGC Off)
Frame Rate	Up to 60 fps
Minimum Illumination	0.01 Lux (COLOR) 0.001 Lux (B&W)
Shutter Speed	1/60 – 1/30,000 sec AUTO
Lens	M12 2MP Lens
Filed of View	112.3° (Horizontal)
Video Output	NTSC / PAL @ 60fps (17.85ms @ Latency NTSC 60fps)
Power consumption	DC12V & DC5V
Operating Temperature	-40°F – 158°F / -40°C – 70°C
Operating Humidity	95% RH Max.
IR LED	N/A
Heater / Fan	N/A
Dimension	0.87" (L) x 0.87" (H) / 22.00mm (L) x 22.00mm(H)
Weight	9g (With Fixed lens)
OSD	
Exposure	Lens, Shutter, AGC
White Balance	ATW, AWB, AWC-SET, Manual
Image Adjust	Sharpness, Gamma, Brightness, Saturation, Black Level
Backlight	HLC, BLC
Day & Night	Auto, Extern, Color, B&W
DNR	Off, Low, Middle, High
Special	Rotate, ACE, Defog, Lens Shading, Privacy, Motion
Serial	Cam ID, Baudrate, ID Display
System	VIDEO Output , Frame Rate, Video System, Language, Cam Title, Reset
CONNECTOR	
Video Output	MOLEX, 53047-0310
Power Input	MOLEX, 53047-0310