

# TNO-6010M

2 MP Mobile Front Facing Network Camera

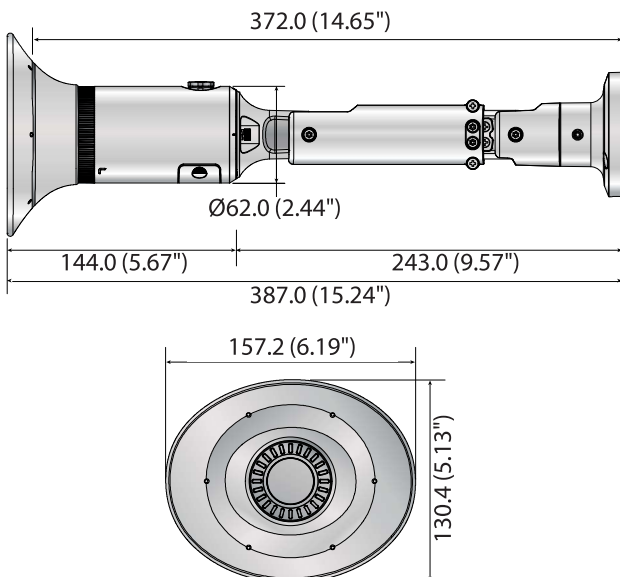


## Key Features

- 2 Megapixel (1920 x 1080) resolution
- 60fps@all resolutions (H.265 / H.264)
- 0.04Lux@F2.0 (Color), 0.004Lux@F2.0 (B/W)
- Built-in 2.8mm fixed lens
- H.265, H.264, MJPEG codec supported, Multiple streaming
- Day & Night (ICR), WDR (150dB)
- Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Enter/Exit, (Dis)Appear, Face detection, Digital auto tracking, Motion detection
- Vibration resistant, railway rolling stock certified, EN045545-2, NFPA 130, BSS 7239, DIS with built-in gyro sensor, Serration and Nylock for release prevention
- SD/SDHC/SDXC memory slot (Maximum 256GB)
- IP66, NEMA4X, IK10
- PoE, LDC, M12 connector with PoE
- Adjustable length & dual joint design to adapt to vehicle
- Rubber lens hood to prevent windshield glare

## Dimensions

Unit: mm (inch)



## TNO-6010M

<b>VIDEO</b>	
Imaging Device	1/2.8" 2 MP CMOS
Total Pixels	1,945(H) x 1,097(V) 2.16M
Effective Pixels	1,945(H) x 1,097(V) 2.13M
Scanning System	Progressive Scan
Minimum Illumination	Color : 0.04Lux (F2.0), B/W : 0.004Lux (F2.0)
S / N Ratio	50dB
Video out, for installation	USB - Micro USB type B, 1280 x 720, for installation, CVBS 1.0Vpp/75Ω, 720 x 480
<b>LENS</b>	
Focal Length (Zoom Ratio)	2.8mm fixed
Maximum Aperture Ratio	F2.0
Angular Field of View	H : 113.7° / V : 61.5° / D : 134.5°
Focus Control	Manual
Lens / Mount Type	Fixed / Board-in type
<b>PAN / TILT / ROTATE</b>	
Pan / Tilt / Rotate Range	360° / 1st tilt adjustment 0° to 120°, 2nd tilt adjustment -30° to 90° / +90°
<b>OPERATIONAL</b>	
Camera Title	Off / On (Displayed up to 85 characters) - English / Numeric / International characters / Special characters - Common : Multi-line (Max. 5), Color (Gray / Green / Red / Blue / Black / White), Transparency, Auto scale by resolution
Day & Night	Auto (ICR) / Color / B/W / External / Schedule
Backlight Compensation	WDR / BLC / HLC (Masking / Dimming)
Wide Dynamic Range	150dB
Contrast Enhancement	SSDR (Off / On)
Digital Noise Reduction	SSNR V (2D + 3D noise filter) (Off / On)
Digital Image Stabilization	Off / On
Defog	Off / Auto / Manual
Motion Detection	Off / On (8ea, 8point polygonal zones)
Privacy Masking	Off / On (32ea, polygonal zones) - Color : Gray / Green / Red / Blue / Black / White - Mosaic
Gain Control	Off / Low / Middle / High
White Balance	ATW / AWC / Manual / Indoor / Outdoor (Including mercury & sodium)
Contrast	Level adjustment
LDC (Lens Distortion Correction)	Off / On - 5 Levels
Electronic Shutter Speed	Minimum / Maximum / Anti flicker (2 ~ 1/12,000sec)
Digital PTZ	24x, Digital PTZ (Preset, Group)
Flip / Mirror	Off / On
Video Analytics	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Enter/Exit, (Dis)Appear, Face detection, Motion detection, Digital auto tracking
Alarm Triggers	Motion detection, Video analytics, Network disconnect
Alarm Events	File upload via FTP, E-mail, Notification via E-mail, Local storage (SD/SDHC/SDXC) or NAS recording at event triggers, External output, DPTZ preset Support
Pixel Counter	
<b>NETWORK</b>	
Ethernet	Male, D-Coded 4-Pole M12 connector (10/100 BASE-T), STP
Video Compression Format	H.265 / H.264 (MPEG-4 part 10/AVC) : Main / Baseline / High, MJPEG
Resolution	1920 x 1080, 1280 x 1024, 1280 x 960, 1280 x 720, 1024 x 768, 800 x 600, 800 x 448, 720 x 576, 720 x 480, 640 x 480, 640 x 360, 320 x 240
Maximum Framerate	H.265 / H.264 : Maximum 60fps at all resolutions, MJPEG : Maximum 30fps
Smart Codec	Manual mode (Area-based : 5ea)
WiseStream II	Support
Video Quality Adjustment	H.265 / H.264, MJPEG : Target bitrate level control
Bitrate Control Method	H.265 / H.264 : CBR or VBR, MJPEG : VBR
Streaming Capability	Multiple streaming (Up to 10 profiles)
IP	IPv4, IPv6
Protocol	TCP/IP, UDP/IP, RTP (UDP), RTP (TCP), RTCP, RTPS, NTP, HTTP, HTTPS, SSL/TLS, DHCP, PPPoE, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, UPnP, Bonjour
Security	HTTPS (SSL) login authentication, Digest login authentication, IP address filtering, User access log, 802.1X authentication (EAP-TLS, EAP-LEAP)
Streaming Method	Unicast / Multicast
Maximum User Access	20 users at unicast mode
Edge Storage	SD/SDHC/SDXC 1 slot (up to 256GB) - Motion Images recorded in the SD/SDHC/SDXC memory card can be downloaded. NAS (Network Attached Storage), Local PC for instant recording
Application Programming Interface	ONVIF profile S/G/T, SUNAPI (HTTP API), Wisenet open platform
Webpage Language	English, Korean, Chinese, French, Italian, Spanish, German, Japanese, Russian, Swedish, Portuguese, Czech, Polish, Turkish, Dutch, Hungarian, Greek
Web Viewer	Supported OS : Windows 7, 8.1, 10, Mac OS X 10.10, 10.11, 10.12 Plugin-Free Webviewer - Supported Browser : Google Chrome 54, MS Edge 38, Mozilla Firefox 49 (Window 64-bit only), Apple Safari 9 (Mac OS X only), MS Internet Explorer 11, Apple Safari 9 (Mac OS X only)
<b>ENVIRONMENTAL</b>	
Operating Temperature / Humidity	-30°C ~ +55°C (-22°F ~ +131°F) / Less than 90% RH * Start up should be done at above -30°C (-22°F)
Storage Temperature / Humidity	-50°C ~ +60°C (-58°F ~ +140°F) / Less than 90% RH
Ingress Protection	IP66, NEMA 4X
Vibration Resistance / Certifications	EN55011:2009+A1:2010, EN50581:2012, EN50121-3-2:2015, EN50155:2007, EN61000-4-2:2009, EN61000-4-3:2006+A2:2010, EN61000-4-4:2012, BSS 7239, EN61000-4-5:2014, EN61000-4-6:2009, EN-45545-2, IP66, IK10, UL, NEMA4X
Vandal Resistance	IK10
<b>ELECTRICAL</b>	
Input Voltage / Current	PoE (IEEE802.3af, Class3, Mode A)
Power Consumption	8W (Maximum), 4.3W (Typical)
<b>MECHANICAL</b>	
Color / Material	Black / Aluminum (Hood : Silicon rubber), RAL color code 9005
Dimensions (WxHxD)	Ø62 x 372mm (2.44Øx14.65") w/o hood, Adjustable length +0-63mm
Weight	1170g (2.58 lb)

Design and specifications are subject to change without notice.

\* The latest product information / specification can be found at [hanwhasecurity.com](http://hanwhasecurity.com)

\* Wisenet is the proprietary brand of Hanwha Techwin, formerly known as Samsung Techwin.