

MT-IPST8281E · DISCONTINUED · NOTICE OF OCTOBER 2026

# MT-IPST8281E is discontinued. Its replacement is **MT-IPBX540**.

MT-IPBX540 — 4MP 5X Zoom Box AI Network Camera — is the official MTechnology replacement for the MT-IPST8281E box camera, including installations inside outdoor housings.



**Lens included.** MT-IPBX540 integrates a 2.7–13.5 mm motorized lens: no separate C/CS lens to source and fit, zoom and focus adjusted remotely.

**Shorter body.** 99.8 mm long with the lens, against 135.4 mm for the MT-IPST8281E body alone.

**Higher resolution.** 4MP instead of 1080p, H.265 coding and AI perimeter protection with human/vehicle classification.

## AT A GLANCE

|                        | MT-IPST8281E (discontinued)           | MT-IPBX540 (replacement)                              |
|------------------------|---------------------------------------|-------------------------------------------------------|
| Resolution             | 2MP, 1920 × 1080                      | 4MP, 2688 × 1520                                      |
| Image sensor           | 1/1.9" CMOS                           | 1/2.9" CMOS                                           |
| Lens                   | C/CS mount, lens sold separately      | Integrated motorized 2.7–13.5 mm (5X)                 |
| Compression            | H.264; MJPEG                          | H.265; H.264; H.265+/H.264+; AI coding                |
| WDR                    | 120 dB                                | 120 dB                                                |
| Analytics              | Tripwire, intrusion, face detection   | Tripwire, intrusion with human/vehicle classification |
| Storage                | Micro SD, max. 64 GB                  | Micro SD, max. 512 GB; NAS; FTP                       |
| Power supply           | 12 VDC / 24 VAC / PoE (802.3af)       | 12 VDC / PoE (802.3af)                                |
| Power consumption      | Max. 3.5 W                            | Max. 9.3 W (12 VDC); 11.9 W (PoE)                     |
| Dimensions (L × W × H) | 135.4 × 74.1 × 65.5 mm (without lens) | 99.8 × 70.5 × 68.2 mm (lens included)                 |
| Net weight             | 0.3 kg (without lens)                 | 0.835 kg (lens included)                              |

When replacing a camera inside an existing housing, check the internal dimensions and mounting, the required field of view, the power supply (12 VDC or PoE, no 24 VAC input), the temperature and condensation inside the housing, and the interfaces used by the existing system. The complete MT-IPBX540 datasheet follows on the next pages — [MT-IPBX540 product page](#).



| AI Analytics                                               | Superior Image Quality                 | Flexible Coding                              | 5X Motorized Zoom                |
|------------------------------------------------------------|----------------------------------------|----------------------------------------------|----------------------------------|
| Perimeter protection, tripwire, intrusion, AI Plus, AI SSA | 4MP 1/2.9" CMOS, 120 dB WDR, 0.005 Lux | H.265+/H.264+, AI H.265/H.264, triple stream | 2.7–13.5 mm lens, DORI compliant |

## FEATURES

- 4MP 1/2.9" CMOS image sensor, low luminance, high definition image
- Outputs max. 4MP (2688 × 1520) @25/30 fps
- H.265 codec, high compression rate, ultra-low bit rate
- ROI, H.264+/H.265+, AI H.264/H.265, flexible coding, applicable to various bandwidth and storage environments
- Rotation mode, WDR, 3D NR, HLC, BLC, digital watermarking, applicable to various monitoring scenes
- Intelligent monitoring: Intrusion, tripwire (support classification and accurate detection of vehicle and human)
- Abnormality detection: Motion detection, video tampering, scene changing, network disconnection, IP conflict, illegal access, voltage detection
- 12 VDC/PoE power supply
- AI Plus
- Supports AI SSA
- ONVIF Profile S/T/M for interoperability with third-party VMS

# MT-IPBX540

## TECHNICAL SPECIFICATIONS

| Camera                      |                                                                                                                                                              |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Image Sensor                | 1/2.9" CMOS                                                                                                                                                  |
| Max. Resolution             | 2688 (H) × 1520 (V)                                                                                                                                          |
| Scanning System             | Progressive                                                                                                                                                  |
| Electronic Shutter Speed    | Auto/Manual 1/3 s–1/100,000 s                                                                                                                                |
| Min. Illumination           | 0.005 lux@F1.4 (Color, 30 IRE)<br>0.0005 lux@F1.4 (B/W, 30 IRE)                                                                                              |
| S/N Ratio                   | >56 dB                                                                                                                                                       |
| Angle Adjustment            | Pan: 0°–360°; Tilt: 0°–90°; Rotation: 0°–360°                                                                                                                |
| Video                       |                                                                                                                                                              |
| Video Compression           | H.265; H.264; H.264H; H.264B; MJPEG (only supported by the sub stream)                                                                                       |
| Advanced Codec              | H.265+ / H.264+                                                                                                                                              |
| AI Coding                   | AI H.265; AI H.264                                                                                                                                           |
| Video Frame Rate            | Main stream: 2688 × 1520@(1 fps–25/30 fps)<br>Sub stream: 1920 × 1080@(1 fps–25/30 fps)<br>Third stream: 1920 × 1080@(1 fps–25/30 fps)                       |
| Stream Capability           | 3 streams                                                                                                                                                    |
| Resolution                  | 4M (2688 × 1520/2560 × 1440); 3M (2304 × 1296); 1080p (1920 × 1080); 720p (1280 × 720); D1 (704 × 576/704 × 480); VGA (640 × 480); CIF (352 × 288/352 × 240) |
| Bit Rate Control            | VBR; CBR; ABR                                                                                                                                                |
| Video Bit Rate              | H.264: 3 kbps–16384 kbps<br>H.265: 3 kbps–16384 kbps                                                                                                         |
| Day/Night                   | Auto (ICR)/Color/B/W                                                                                                                                         |
| BLC                         | Yes                                                                                                                                                          |
| HLC                         | Yes                                                                                                                                                          |
| WDR                         | 120 dB                                                                                                                                                       |
| Scene Self-adaptation (SSA) | Yes                                                                                                                                                          |
| White Balance               | Auto; natural; street lamp; outdoor; manual; regional custom                                                                                                 |
| Gain Control                | Auto                                                                                                                                                         |
| Noise Reduction             | 3D NR                                                                                                                                                        |
| Motion Detection            | OFF/ON (4 areas, rectangular)                                                                                                                                |
| Region of Interest (RoI)    | Yes (4 areas)                                                                                                                                                |
| Defog                       | Yes                                                                                                                                                          |
| Image Rotation              | 0°/90°/180°/270° (support 90°/270° with 2688 × 1520 resolution and lower)                                                                                    |
| Privacy Masking             | 8 areas                                                                                                                                                      |
| Intelligence                |                                                                                                                                                              |
| IVS (Perimeter Protection)  | Tripwire, intrusion (support the classification and accurate detection of vehicle and human)                                                                 |
| AI Plus                     | AI Plus                                                                                                                                                      |
| AI SSA                      | Adopt deep learning algorithms to adjust the parameters of the image to suit the conditions                                                                  |

| Lens                  |                                                                                                                                                                                                                                                           |                    |                     |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|---------------------|
| Lens Type             | Motorized 5X Zoom                                                                                                                                                                                                                                         |                    |                     |
| Lens Mount            | φ14                                                                                                                                                                                                                                                       |                    |                     |
| Focal Length          | 2.7 mm–13.5 mm                                                                                                                                                                                                                                            |                    |                     |
| Max. Aperture         | F1.4                                                                                                                                                                                                                                                      |                    |                     |
| Field of View         | H: 104°–29°; V: 54°–16°; D: 125°–34°                                                                                                                                                                                                                      |                    |                     |
| Iris Control          | Fixed                                                                                                                                                                                                                                                     |                    |                     |
| Close Focus Distance  | 0.1 m (0.33 ft)                                                                                                                                                                                                                                           |                    |                     |
| DORI Distance         | Lens                                                                                                                                                                                                                                                      | W                  | T                   |
|                       | Detect                                                                                                                                                                                                                                                    | 64.0 m (209.97 ft) | 210.0 m (688.98 ft) |
|                       | Observe                                                                                                                                                                                                                                                   | 25.6 m (83.99 ft)  | 84.0 m (275.59 ft)  |
|                       | Recognize                                                                                                                                                                                                                                                 | 12.8 m (41.99 ft)  | 42.0 m (137.80 ft)  |
|                       | Identify                                                                                                                                                                                                                                                  | 6.4 m (21.00 ft)   | 21.0 m (68.90 ft)   |
| Network               |                                                                                                                                                                                                                                                           |                    |                     |
| Network Port          | RJ-45 (10/100 Base-T)                                                                                                                                                                                                                                     |                    |                     |
| SDK and API           | Yes                                                                                                                                                                                                                                                       |                    |                     |
| Network Protocol      | IPv4; IPv6; HTTP; TCP; UDP; ARP; RTP; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP; Multicast; ICMP; IGMP; NFS; SAMBA; PPPoE; SNMP; P2P                                                                                             |                    |                     |
| Interoperability      | ONVIF (Profile S/T/M); CGI                                                                                                                                                                                                                                |                    |                     |
| User/Host             | 20 (Total bandwidth: 64 M)                                                                                                                                                                                                                                |                    |                     |
| Storage               | FTP; SFTP; Micro SD card (support max. 512 G); NAS                                                                                                                                                                                                        |                    |                     |
| Management Software   | MT Suite; MT App; CGI, compatible VMS                                                                                                                                                                                                                     |                    |                     |
| Mobile Client         | iOS; Android                                                                                                                                                                                                                                              |                    |                     |
| Cyber Security        | Video encryption; Firmware encryption; Configuration encryption; Digest; WSSE; Account lockout; Security logs; IP/MAC filtering; Generation and importing of X.509 certification; syslog; HTTPS; 802.1x; Trusted boot; Trusted execution; Trusted upgrade |                    |                     |
| Power                 |                                                                                                                                                                                                                                                           |                    |                     |
| Power Supply          | 12 VDC/PoE (802.3af)                                                                                                                                                                                                                                      |                    |                     |
| Power Consumption     | Basic: 3.2 W (12 VDC); 4.8 W (PoE)<br>Max.: 9.3 W (12 VDC); 11.9 W (PoE)                                                                                                                                                                                  |                    |                     |
| Environment           |                                                                                                                                                                                                                                                           |                    |                     |
| Operating Temperature | –30 °C to +60 °C (–22 °F to +140 °F)                                                                                                                                                                                                                      |                    |                     |
| Operating Humidity    | ≤95% (RH), non-condensing                                                                                                                                                                                                                                 |                    |                     |
| Structure             |                                                                                                                                                                                                                                                           |                    |                     |
| Casing                | Metal and Nylon                                                                                                                                                                                                                                           |                    |                     |
| Product Dimensions    | 99.8 mm × 70.5 mm × 68.2 mm (3.93" × 2.78" × 2.69") (L × W × H)                                                                                                                                                                                           |                    |                     |
| Net Weight            | 835 g (1.84 lb)                                                                                                                                                                                                                                           |                    |                     |

Datasheet rev.A26.10