



- 3.5 inch TFT screen
- 2MP (1920×1080) real-time H.265 coding
- Face recognition distance: 0.3m-2m
- Support face detection technology distinguishing real faces from non-real face spoof attacks
- Support 3D DNR, HWDR, BLC, HLC, Defog, etc.
- Support multiple door opening modes (by swiping card, by password, by face recognition, etc.)
- Support door opening by indoor station or by mobile APP
- Support copy-prevention for IC card; support IC card encryption
- Support anti-tampering alarm; support triggering alarms when the door is not secured or the door is broken by others
- Support calling indoor station/APP
- Support card reader access via RS485 interface
- Support 2.4G Wi-Fi; Support P2P function
- Support remote surveillance via mobile APP, web browser or tablet PC
- Intelligent analytics: video exception detection, face detection, face capture, face comparison
- IP67

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### Specifications

Model	TD-E2223-EM/IC/PE /WF
Camera	
Image Sensor	1/2.8" Progressive Scan CMOS
Image Size	1920×1080
Electronic Shutter	Auto/Manual; Manual:1/2s ~ 1/100000s
IRIS Type	Fixed IRIS
MIN. Illumination	Color: 0.0085lux@F1.2, AGC ON; B&W: 0 lux with IR
	M8 HD dual lens: 2.3mm@F2.2
Lens	Vertical FOV: approx. 74°, Horizontal FOV: approx. 139°, Diagonal FOV: approx. 170°
WDR	120dB
S/N Ratio	≥50dB
BLC	Yes
HLC	Yes
Defog	Yes
DNR	2D/3D NR
Image	
-	Main stream: H.265+/H.265/H.264+/H.264
Video Compression	Sub/third stream: H.265+/H.265/H.264+/H.264/MJPEG
H.264 Compression Standard	Baseline Profile/Main Profile/High Profile
Bit rate Type	VBR/CBR
Bit Rate	64Kbps ~ 6Mbps
Resolution	1080P(1920×1080), 720P(1280×720), D1, CIF, 480×240
Main Stream	1920×1080/1280×720(60Hz: 1~30fps; 50Hz: 1~25fps )
Sub Stream	720P/D1/CIF(60Hz: 1~30fps; 50Hz: 1~25fps)
Third Stream	D1/CIF/480×240(60Hz: 1~30fps; 50Hz: 1~25fps )
Image Setting	Saturation, hue, brightness, contrast, wide dynamic range, sharpness, NR, etc., adjustable through client or web browser
Audio Compression	G711A/U
Screen	
3.5 Inch TFT Screen	Resolution: 320 (RGB) ×480
Brightness	250cd/m <sup>2</sup>
Auto sleeping	Support auto wakeup when detecting a person or wakeup by pressing a button
Card	
	Mifare card /Desfire card/FM1208 Card/Gicard /EM Card
Card Type	
Card Type Card Reading Protocol	ISO14443A/B protocol,EM41XX
Card Type Card Reading Protocol Card Reading Frequency	ISO14443A/B protocol,EM41XX 13.56MHz & 125KHz
Card Type Card Reading Protocol Card Reading Frequency Card Reading Duration	ISO14443A/B protocol,EM41XX 13.56MHz & 125KHz <1s
Card Type Card Reading Protocol Card Reading Frequency Card Reading Duration Card Reading Distance	ISO14443A/B protocol,EM41XX     13.56MHz & 125KHz     <1s
Card Type Card Reading Protocol Card Reading Frequency Card Reading Duration Card Reading Distance Card Capacity	ISO14443A/B protocol,EM41XX 13.56MHz & 125KHz <1s
Card Type Card Reading Protocol Card Reading Frequency Card Reading Duration Card Reading Distance Card Capacity Interfaces	ISO14443A/B protocol,EM41XX   13.56MHz & 125KHz   <1s
Card Type Card Reading Protocol Card Reading Frequency Card Reading Duration Card Reading Distance Card Capacity Interfaces Network	ISO14443A/B protocol,EM41XX   13.56MHz & 125KHz   <1s
Card Type Card Reading Protocol Card Reading Frequency Card Reading Duration Card Reading Distance Card Capacity Interfaces Network Video Output	ISO14443A/B protocol,EM41XX   13.56MHz & 125KHz   <1s
Card Type Card Reading Protocol Card Reading Frequency Card Reading Duration Card Reading Distance Card Capacity Interfaces Network Video Output Audio	ISO14443A/B protocol,EM41XX   13.56MHz & 125KHz   <1s
Card Type Card Reading Protocol Card Reading Frequency Card Reading Duration Card Reading Distance Card Capacity Interfaces Network Video Output Audio Storage	ISO14443A/B protocol,EM41XX   13.56MHz & 125KHz   <1s
Card Type Card Reading Protocol Card Reading Frequency Card Reading Duration Card Reading Distance Card Capacity Interfaces Network Video Output Audio Storage Reset	ISO14443A/B protocol,EM41XX   13.56MHz & 125KHz   <1s
Card Type Card Reading Protocol Card Reading Frequency Card Reading Duration Card Reading Distance Card Capacity <b>Interfaces</b> Network Video Output Audio Storage Reset RS485	ISO14443A/B protocol,EM41XX   13.56MHz & 125KHz   <1s
Card Type Card Reading Protocol Card Reading Frequency Card Reading Duration Card Reading Distance Card Capacity Interfaces Network Video Output Audio Storage Reset RS485 Wiegand Interface	ISO14443A/B protocol,EM41XX   13.56MHz & 125KHz   <1s
Card Type Card Reading Protocol Card Reading Frequency Card Reading Duration Card Reading Distance Card Capacity Interfaces Network Video Output Audio Storage Reset RS485 Wiegand Interface Alarm	ISO14443A/B protocol,EM41XX   13.56MHz & 125KHz   <1s
Card Type Card Reading Protocol Card Reading Frequency Card Reading Duration Card Reading Distance Card Capacity Interfaces Network Video Output Audio Storage Reset RS485 Wiegand Interface Alarm Door Lock Output	ISO14443A/B protocol,EM41XX   13.56MHz & 125KHz   <1s
Card Type Card Reading Protocol Card Reading Frequency Card Reading Duration Card Reading Distance Card Capacity <b>Interfaces</b> Network Video Output Audio Storage Reset RS485 Wiegand Interface Alarm Door Lock Output Door Contact Input	ISO14443A/B protocol,EM41XX   13.56MHz & 125KHz   <1s
Card Type Card Reading Protocol Card Reading Frequency Card Reading Duration Card Reading Distance Card Capacity <b>Interfaces</b> Network Video Output Audio Storage Reset RS485 Wiegand Interface Alarm Door Lock Output Door Contact Input Exit Button	ISO14443A/B protocol,EM41XX   13.56MHz & 125KHz   <1s
Card Type Card Reading Protocol Card Reading Frequency Card Reading Duration Card Reading Distance Card Capacity Interfaces Interfaces Network Video Output Audio Storage Reset RS485 Wiegand Interface Alarm Door Lock Output Door Contact Input Exit Button Anti-Tamper Interface	ISO14443A/B protocol,EM41XX   13.56MHz & 125KHz   <1s
Card Type Card Reading Protocol Card Reading Frequency Card Reading Duration Card Reading Distance Card Capacity Interfaces Network Video Output Audio Storage Reset RS485 Wiegand Interface Alarm Door Lock Output Door Contact Input Exit Button Anti-Tamper Interface Swiping Card Area	ISO14443A/B protocol,EM41XX   13.56MHz & 125KHz   <1s
Card Type Card Reading Protocol Card Reading Frequency Card Reading Duration Card Reading Distance Card Capacity Interfaces Interfaces Network Video Output Audio Storage Reset RS485 Wiegand Interface Alarm Door Lock Output Door Contact Input Exit Button Anti-Tamper Interface Swiping Card Area Digital Buttons	ISO14443A/B protocol,EM41XX   13.56MHz & 125KHz   <1s
Card Type Card Reading Protocol Card Reading Frequency Card Reading Duration Card Reading Distance Card Capacity Interfaces Network Video Output Audio Storage Reset RS485 Wiegand Interface Alarm Door Lock Output Door Contact Input Exit Button Anti-Tamper Interface Swiping Card Area	ISO14443A/B protocol,EM41XX   13.56MHz & 125KHz   <1s

	Face picture, ID number, list type(group), name, gender, age, phone number, card ID, password, door opening
Personal Properties	mode, note
Door Opening Modes	By face recognition/swiping card/password/indoor station/APP
Schedule	Yes
Mask Detection	Yes
Secondary Door Station	Yes
Capacity	50000 event items can be recorded
Function	
Remote Monitoring	Web client/indoor station/CMS remote control
Online Connection	Supports simultaneous monitoring for up to 10 users Supports multi-stream real time transmission
Network Protocol	UDP, IPv4, IPv6, DHCP, NTP, RTSP, PPPoE, DDNS, SMTP, FTP, 802.1x, UPnP, HTTPS, Qos, SIP
Interface Protocol	ONVIF
Storage	Network remote storage, SD card storage
Intelligent Analytics	SD card error, SD card full, IP address conflict, network disconnection
General Function	Watermark, IP address filtering, heartbeat, illegal login
PoE	Yes (802.3af)
P2P	Yes, turn on by default
IR Distance	0.3-2m
Protection Grade	IP67, IK04
Network Security	Video encryption, firmware encryption, configuration encryption, Digest, illegal login lock, IP address filtering, HTTPS, 802.1x
Intelligent Analytics	
Intelligent Analytics	Face detection, face capture, face comparison
Face Detection	Pupil distance of a facial image over 20 pixel can be detected
Face Capture	Outputting the optimal face image by precise detecting, tracing, capturing, scoring and screening the moving faces
Original Image Capturing	Supports original image capturing and self-defined overlaid information (like device ID, time, etc.)
Face Picture Database	10000
Face Comparison Storage	Face pictures can be added, modified or deleted in the face database.
Face Picture Adding	Adding face pictures through WEB, NVR or NVMS
External Face Picture Enrollment	Size: less than 200KB, JPG/JPEG format
Face Comparison Alarm	Face detection alarm, allow list, block list and stranger alarm
Others	
Power	DC12V/PoE
Power Consumption	< 12W
Environmental Protection	RoHS 2.0, REACH, WEEE, directive94/62/EC
Working Environment	-20°C~60°C, Humidity: less than 95% (non-condensing)
Dimensions(mm)	Approx. 210mm ×104mm ×30mm
Weight (net)	Approx. 0.6 kg
Installation	Wall Mounting

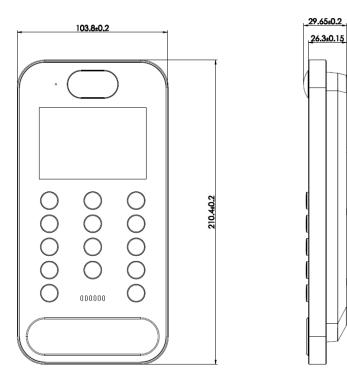
#### Dimensions

Unit (mm))

TVT



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#### Accessory

Optional



TD-YZJ1008