TDR728

H.265, Full HD 1080P at 30 fps,
15M(49.2ft) IR Distance,
Capture Range 2-10M
Speed of Vehicles 0-120 km/h (0-74 mile/h),
IK10 Vandal Proof, IP66 Weatherproof,
EN50155 Railways Applications
License Plate Capture Network Camera

Full HD | H.265 | 30fps | S-WDR | Smart ICR | Defog | Video Analytics

Object Counting | PoE | Alarm In/Out | SD Card | Audio | IP66 | IK10

EN-50155

- SmartCatch Technology ensures excellent 24/7 performance while producing clear, consistent, and accurate license plate images

- Advanced ambient compensation eliminates headlight glare and minimizes exposed plates for improved LPR/ ANPR accuracy

- Convenient image adjustment allows configuration for regional plate characteristics

- With LPR mode, the camera is able to isolate high-contrast license plate numbers from the moving vehicles to increase recognition accuracy. By switching to Overview mode, users can not only see license plates clearly, but also monitor the whole area with clear images day and night.

- The camera is specially designed for combating extreme weather conditions.
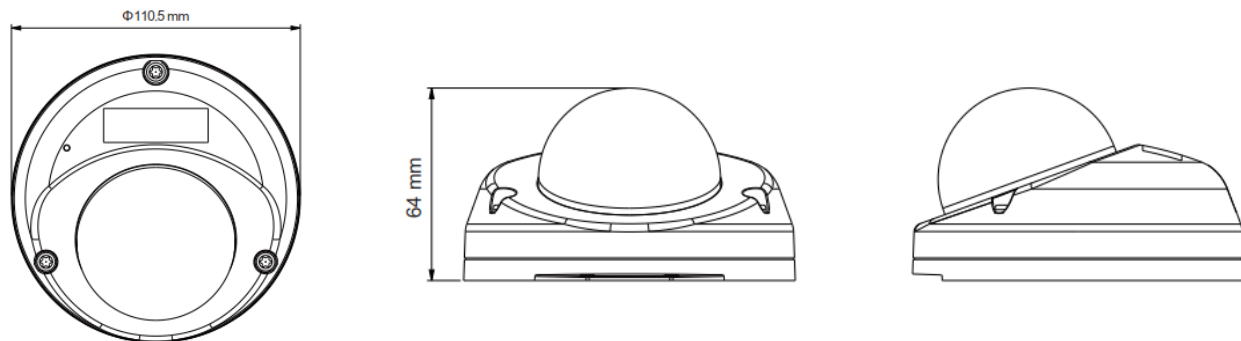
- SmartCatch II ™ SoC LPR Mode
- Vehicle speed 0-120 km/h or 0-74 mile/h
- 1/2.8" 2MP Sony STARVIS CMOS Progressive Sensor
- Full HD 1080P @ 30 fps
- 2.8mm Lens F1.6 (110º FOV)/ 8mm Lens F2.0 (40º FOV)
- Ultra Low Light (0.0005 Lux)
- IR Illuminator: 15M(49.2ft) IR Distance, Smart IR+
- Smart Filtering Function: Removable IR-cut Filter for Day and Night
- Extreme Wide Dynamic Range (WDR) with Multi Shutters (140dB)
- H.265/H.264/M-JPEG Video Compression
- Intelligent VA Functions: Tampering Alarm, Object Counting, Intrusion Detection, Alarm Detection; Advanced Motion Detection (5 areas)
- Support Image Stabilization; Corridor format
- SDS (Smart Dynamic Streaming) Plus: Smart ROI, FPS, GOP
- Support M12 connector
- Hard Coated Cover with Rain-wash Coating
- Anti-Corrosion Powder Coating
- Sturdy Camera Body from Aluminum Die Casting
- IK 10 Vandal Resistant, IP 66 Weatherproof
- Operating Temperature from -30ºC to 60ºC / -22ºF to 140ºF
- Alarm-in/-out, Audio-in/-out, Micro SD Card Slot, Built-in microphone
- ONVIF Profile S, G, Q, T

DIVIO Tec ™

Sensor	
Image Sensor	1/2.8" 2MP Sony STARVIS CMOS Progressive Sensor
Effective Pixels	1920(H) x 1080(V)
Minimum Illumination	Color: 0.005 Lux; B/W: 0.0005 Lux
LPR	
License Plate	Reflective, Non-reflective
License Plate Capture Range	2~10M (6~32ft)
Speed of the Vehicle	0~120km/h or 0~74 mile/h *The best testing result is under sufficient lighting condition
SmartCatch™ SoC	**LPR mode** - High contrast image - Support reflective car plate - IR LED/ Car Speed adjustable
Lens	
Lens Type	Fixed lens
Focal Length	2.8mm F1.6 (FOV 110°)/ 8mm F2.0 (FOV 40°)
Field of View	2.8mm: 110°(H)/ 62°(V)/ 137°(D) 8mm: 40°(H)/ 22°(V)/ 46°(D)
Built-in IR Illuminator	
Illumination Distance	Up to 15M(49.2ft), 850nm Wavelength
IR Control	Smart IR+
Image Setting	
Optical Zoom	Zoom Control: 1-200 level, Focus Control (Slider Control): Auto Focus, Micro Adjustment
Image Adjustment	Brightness (Value: 0-100), Contrast (Value: 0-100), Saturation (Value: 0-100), Sharpness (Value: 0-255), Hue Adjustment (Value: 0-100)
Digital Image Stabilization (DIS)	Yes
Orientation	Mirror(Flip left-to-right/ Flip top-to-bottom)/ Corridor
ROI (Region of Interest)	Stream 1/ Stream 2; 5 Zones , Low / Medium /High
Privacy Mask	5 Masks
OSD	Text Position: Top Left/ Top Right/ Bottom Left/ Bottom Right Text Color: Transparent/ Translucent; Black/ White/ Green/ Yellow Text Content: Date/Time, Camera Name, Camera Name+ Date/Time, Custom Text
Exposure	Auto/ Anti-Flicker 50Hz/ Anti-Flicker 60Hz/ Locked, Value Adjustment Range 0 - 255
Shutter Speed	1/7-1/20000 sec.
Gain Control	OFF/ Low/ Medium/ High/ User Define(Value Adjustment Range 1-512)
BLC	Disable / Enable
Wide Dynamic Range	Multi shutter WDR 140dB; Off/ Auto/ Level 1-10
AWB (Auto White Balance)	Auto/ OFF (RG Gain 0.00-10.00, BG Gain 0.00-10.00)

Defog	Low/ Medium/ High ; LPR Mode: Value Adjustment Range 0-255
Noise Reduction(Noise Filter)	On/Off (Level 1 - 11)
Day/Night	Auto/ Forced Day/ Force Night/ Schedule
Image Profile Control	Force Day/ Force Night/ Auto(Follow Day Night Control)
ICR (IR Cut) Control	Force Day/ Force Night/ Auto(Follow Day Night Control)/ Light Sensor
IR LED Control	OFF/ Auto/ High/ Medium/ Low/ Light Sensor
LPR Mode Image Setting	
Max Car Speed (km/h)	0-120 km
Max Sens Up Gain	0-512 level
External Lighting Control	ON/ OFF
Defog	0-255 level
IR LED Intensity	0-100 level
Video	
Video Streaming	Triple streaming
Video Compression	H.265 / H.264 / M-JPEG
Video Resolution/Frame Rate	Full HD 1080P(1920 X 1080),HD 720P(1280 x 720) / D1-PAL (720x576)@30FPS/ D1-NTSC (720x480)@30FPS/ VGA (640x480)/640x 360/QVGA (320x240) @30FPS
Video Quality	H.265 / H.264: CBR/ CVBR ; MJPEG: Low/ Medium/ High
Bit Rate	64-8000 kbit/s
Frame Rate	30fps max
GOP Length	1-120 level
Smart Streaming	Smart ROI, FPS, GOP
Audio	
Audio Streaming	support Full-Duplex; Volume: Low/ Mid/ High
Audio Compression	G.711 8KHZ/ 16bits; U-Law/ A-Law
Event Triggers & Actions	
Alarm Detection	On/ Off/ Schedule
Motion Detection	On/ Off/ Schedule, 5 Zones, Sensitivity: range 1-100
Tampering Alarm	On/ Off/ Schedule, Sensitivity: Low/ Medium/ High
Object/ Intrusion Detection	On/ Off/ Schedule (Line) Object-Counting (One way/ Two way) / Line Intrusion (One way/ Two way) / Zone Object-Counting (Inside/ Outside) / Zone Intrusion (Inside / Outside)
Event Trigger	Alarm Detection, Motion Detection, Tampering Alarm, Object Detection, Intrusion Detection
Event Actions	Save Video/Snapshot to SD card (5 seconds pre-recording, 100 seconds post-recording, AVI & JPEG format) File upload stream to FTP Server, HTTP Network Shortage E-mail notification via SMTP Alarm output
Network	
Interface	10/100 Mbps Ethernet, RJ-45/ M12 connector (optional)

Specifications

Protocol	IEEE802.1x, DNS, DDNS, DHCP, Firewall, FTP, GB28181, HTTP, HTTPS, IPv4, IPv6, LDAP, NTP, RTP, RTSP ,RTMP, SSL,SSH, SNMP, SMTP,TCP/IP, UDP, UPnP, Zero Configure, ONVIF
Security	HTTP encryption/Multi-level user management (15 users)/IP address filtering
Connectivity	ONVIF Profile S, G, Q, T
DDNS Settings	Support DynDNS/NO-IP/Two-DNS server
Multicast Function	Yes
Browser	Internet Explorer, Google Chrome, Mozilla Firefox
General	
Audio I/O	Line-in/ Line-out, built-in microphone
Digital I/O	DIx1, DOx1
Weatherproof	IP66
Vandal Resistant	IK10
Operating Temperature	-30ºC to 60ºC / -22ºF to 140ºF
Humidity	10% ~ 90%, No Condensation
Power Source	PoE (IEEE 802.3af), DC12V
Reset button	Yes
Power Consumption	6W
Dimension	Φ 110.5 mm x 64 mm
Application	SDK available for application development
Micro SD	Micro SDHC support up to 128GB
Weight	400g
Certification	CE/FCC Class A/EN50155
Ordering Information	TDR728-028 with 2.8mm lens TDR728-080 with 8mm lens TDR728-028-M with 2.8mm lens, M12 power connector TDR728-080-M with 8mm lens, M12 power connector

Dimension Drawing