



## Key Features

- Ultra-tough, Electropolished 316 Stainless Steel rugged PTZ camera
- PoE 90W (802.3bt Midspan) Version available
- Adaptive White Light and IR (zoom-linked) operation
- Intelligent, Auto- PTZ Tracking
- VMS Integration, including Redvision VMS1000<sup>TM</sup>
- Rugged Mounting Bracket Options
- Brushless Stepper Motors for Resilience and durability
- ONVIF Compliant
- SD Card recording option, up to 256GB.

### X3 STORM™ rugged ball PTZ

The X3-STORM™ rugged, 3 Megapixel PTZ camera is designed for extreme environment surveillance applications. The camera body is precision-manufactured from Electropolished 316 Stainless-Steel, with toughened, optically flat glass (polycarbonate option available), making it highly resistant to vandalism and demanding environmental conditions. It has a long-life silicone wiper as standard and high-efficiency, adaptive, long-range white-light and IR LED illumination as options, for exceptional night-time and lowlight operation.

Everything about the X3-STORM™ rugged, ball PTZ is of high quality. All moving parts are designed to last; from its long-life, silicone wiper through to the motor technology used in its pan and tilt mechanism and its 30x optical zoom camera module, with exceptional low-light performance. The camera is perfectly balanced, minimising component wear and giving a mean time before failure (MTBF) rating of 7 years.

### Ultimate resilience

The X3-STORM™ is designed for the ultimate in resilient, rugged surveillance camera applications, such as Coastal, Heavy Industrial, Tunnels, Highways, Mining and Petrochemical environments. All exterior components are made from 316 grade Stainless Steel, resulting in excellent corrosion resistance when exposed to the elements.

The unique manufacture of the X3-STORM™ uses an investment casting process, with critical tolerance machining to ensure incredible precision with minimal material wastage.

### Simple install, maintenance free

The X3-STORM™ is designed for easy installation and configuration. A complete range of brackets, mounts and cable extensions allow upright or hanging installation in any environment.

The X3-STORM™ mounting bracket has a 4" PCD mount with M8 clearance holes. A complete range of brackets, mounts and cable extensions

are also available, which are electropolished 316 Stainless Steel.

The X3-STORM™ utilises a tooled silicone wiper option to keep the camera's view through the flat, scratch-resistant window free of water and dirt. A linkage-free, sprung steel mechanism reduces wiper wear and a polycarbonate window gives an even tougher option. Wiper activation is by a button press on VMS systems, including the VMS1000™, or by pre-set.

### Extensive features

The X3-STORM™ has an extensive range of features including four video streams for recording, visualisation, set-up and servicing; H265, H264 and MJPEG compression; optional 256GB maximum SD card-based edge storage; ONVIF compliance to Profile S, G and Q; 400 pre-sets, 12 tours, 12 scans, 6 tracks and 20 privacy masks; alarms, motion detection, intelligent analytics and tracking; and its operating temperature range is -40°C to 70°C. A 90W PoE version (802.3bt Midspan) offers quick and easy connectivity via RJ45 socket, operating over a full 100m Cat 5e span.

### Night-time performance

The Redvision X3-STORM™ rugged, ball PTZ cameras have infra-red (IR) and white light illumination options, using long-life, super-efficient LEDs. DORI (Detection, Observation, Recognition and Identification) tests show that the X3-STORM™ performs up to 300m.

The X3-STORM™ has Osram adaptive illumination, automatically adjusting IR and white light intensity in proportion to zoom and scene content. This feature ensures scene images are well-lit, but not bleached by over-exposure.

White light can be switched on as a visual deterrent to intruders.

### Intelligent auto-PTZ tracking

The X3-STORM™ has intelligent, auto PTZ tracking where the camera will automatically follow people or vehicles moving within a scene, adjusting zoom and focus in real-time.

Image	Part Code and Description
	<p><b>RVX3:</b> 30:1 3MP, 316 Stainless Steel Zoom Ball PTZ, WIPER</p> <p><b>RVX3-POE:</b> 30:1 3MP, 316 Stainless Steel Zoom Ball PTZ, WIPER. High-PoE (802.3bt Midspan) 60W</p> <p><b>RVX3-ALM:</b> 30:1 3MP, 316 Stainless Steel Zoom Ball PTZ, 4 alarm inputs, 2 alarm outputs, WIPER</p>
	<p><b>RVX3-IR:</b> 30:1 3MP, 316 Stainless Steel Zoom Ball PTZ, IR, WIPER</p> <p><b>RVX3-POE-IR:</b> 30:1 3MP, 316 Stainless Steel Zoom Ball PTZ, IR, WIPER. High-PoE (802.3bt Midspan) 90W</p> <p><b>RVX3-ALM-IR:</b> 30:1 3MP, 316 Stainless Steel Zoom Ball PTZ, 4 alarm inputs, 2 alarm outputs, IR, WIPER</p>
	<p><b>RVX3-IRWL:</b> 30:1 3MP, 316 Stainless Steel Zoom Ball PTZ, IR/ White Light, WIPER</p> <p><b>RVX3-POE-IRWL:</b> 30:1 3MP, 316 Stainless Steel Zoom Ball PTZ, IR/ White Light, WIPER. High-PoE (802.3bt Midspan) 90W</p> <p><b>RVX3-ALM-IRWL:</b> 30:1 3MP, 316 Stainless Steel Zoom Ball PTZ, 4 alarm inputs, 2 alarm outputs, IR/ White Light, WIPER</p>

Image	Part Code and Description	Drawing
	<b>RVX3-STANDOFF:</b> 120 mm Standoff mount bracket	
	<b>RVX3-WALL:</b> Wall mount bracket	
	<b>RVX3-VISOR:</b> Sun & rain Visor (only applies when camera is mounted in upright position)	
	<b>RVX2-WASH:</b> Washer nozzle kit – compatible with standard CCTV wash pumps	
	<b>RVX2-PSU:</b> 24V DC PSU for X2/X3/X4 non alarm and alarm ball PTZ	
	<b>RV-POE-INJ-90W:</b> 90W Single Port Multi-Gig Power over Ethernet Midspan IEEE 802.3bt Compliant Power Injector	
Other	<b>RVX3-SD, RVX3-PC4</b>	

## Camera Specification

<b>Camera module</b>	30x optical zoom, 3MP, 1/2.8 CMOS Low-Light sensor, True-ICR
<b>Lens</b>	4.5mm ~ 135mm FOV: 59.8° (Wide) ~ 2.3° (Tele)
<b>Sensitivity</b>	Colour: 0.01Lux @ F1.2 Monochrome: 0.0001Lux @ F1.2 (AGC ON)
<b>Shutter Speed</b>	Auto, 1-10,000/s
<b>Iris</b>	Auto/ Manual
<b>Noise Reduction</b>	3D Digital
<b>Image Enhancement</b>	dWDR, BLC, HLC, Defog
<b>Digital Image Stabilisation</b>	Yes
<b>P/T Range</b>	Pan: 360° continuous Tilt: 150° (Cantilever function gives 180° view range)
<b>P/T Speed</b>	Pan: 50°/sec Tilt: 50°/sec
<b>Privacy</b>	20 Masks, individual colour choice
<b>Preset Positions</b>	400
<b>Preset Tours</b>	12
<b>Autopan Scans</b>	12
<b>Mimic Patterns</b>	6
<b>P/T Coordinates</b>	Yes, OSD Display

## Video Streaming

<b>Video Compression</b>	H.265, H.264, MJPEG
<b>Streams</b>	3 + Service Stream
<b>Resolutions</b>	Stream 1: 2048 x 1536 (3MP), 1920 x 1080 (2MP), 1280 x 720 (1.3MP) Stream 2: D1, VGA, 640 x 360, CIF, QVGA Stream 3: VGA, CIF, QVGA
<b>RTSP Video</b>	RFC2326, Supports VLC & QuickTime
<b>FPS</b>	30fps max.
<b>Bitrate</b>	Stream 1: 500kbps ~ 12Mbps Stream 2: 100kbps ~ 6Mbps Stream 3: 100kbps ~ 6Mbps
<b>ROI</b>	Yes

## Network Interface

<b>Interface</b>	Ethernet RJ45, 10-100 Base-T connection, T568A 10/100 Mode B
<b>Supported Protocols</b>	IPv4, HTTP, HTTPS, 802.1x, TCP, UDP, RTSP, DHCP, NTP, RTCP/RTP, PPPoE, SMTP, SNMP, DNS, UPnP, FTP, ICMP, IGMP, Unicast/ Multicast
<b>Languages (Web interface)</b>	English, French, Italian, Spanish, Russian
<b>ONVIF</b>	Profile S, G, Q
<b>Edge Storage (optional)</b>	Up to 256GB
<b>Security</b>	Base-64 authentication, HTTPS (SSL), 802.1x, IP Address Filtering

## Events

<b>Alarm I/O</b>	4 in, 2 out
<b>Intelligent Motion Tracking</b>	Yes
<b>Event Notifications/ Actions</b>	Email (5 recipients), FTP Upload, SD Event recording, alarm output, live stream display, mobile app push notification.
<b>Intelligent Analytics</b>	Perimeter, Virtual Fences, Loitering, Objects left/Removed, Speed, Illegal Parking, with scene calibration and scheduling, email recipients upon event, FTP upload, record event to SD, ONVIF event notification and video overlay.
<b>Motion Detection</b>	Detection grid, scheduling
<b>System Events</b>	SD, Network issue, ICR Switch

## Electrical & Physical

<b>Power Supply</b>	24VDC via RVX2 PSU module; input 100-240VAC 50/60Hz. PoE Version: RJ45 socket, takes power & data (90W)
<b>Power Consumption</b>	24VDC: 50W. PoE: 802.3bt Midspan 90W (LED models)
<b>Dimensions</b>	Non-Lamp models: 386 x 211 x 214mm Lamp models: 386 x 313 x 214mm
<b>Weight</b>	14kg without lamps, 18kg with lamps
<b>Operating Temperature</b>	-40°C ~ +70°C
<b>Impact rating</b>	Meets IK10 standards (with Polycarbonate window fitted)
<b>Corrosion Testing</b>	ASTM B117 1000 hour Salt-Spray Test
<b>Ingress protection</b>	Meets IP68 standards, NEMA 4x requirements
<b>Vibration testing</b>	TEN 50556:2011, clauses 6.3.2 & 11 (Table 3, Class AL2) EN 60068-2-64-2008 Test Fh
<b>EMC</b>	EN 55032:2015 EN55035:2017 Class A
<b>Camera body</b>	316 Stainless-Steel
<b>Colour</b>	Electropolished Stainless Finish. Custom RAL made to order.

## Lighting & DORI

<b>Illumination Range</b>	IR (850nm) to 300m White Light to 250m
<b>DORI Category</b>	<b>Distance covered</b>
<b>Detection</b>	IR Light: 300m White Light: 250m
<b>Observation</b>	IR Light: 250m White Light: 200m
<b>Recognition</b>	IR Light: 150m White Light: 150m
<b>Identify</b>	IR Light: 75m White Light: 75m

