

# NVX with SONY FCB-EV7520 camera and VIDEOTEC ANALYTICS



## STAINLESS STEEL FULL HD CAMERA

IP66/IP67  
IP68/IP69

TYPE 4X  
TYPE 6P



- Exceptional corrosion resistance
- Impeccable quality image
- Image electronic stabilizer
- Quick connectors and modular integrated support
- Integrated video analysis available



### HIGH STRENGTH AND VAST APPLICATION RANGE

The NVX camera is entirely made of AISI 316L stainless steel and stands out for its exceptional resistance to corrosion. NVX was designed to guarantee efficient video surveillance in offshore/onshore marine environments, but also in applications for the rail and transport sectors.

The high anti-corrosion properties of its AISI316L stainless steel structure combined with the vast temperature range and the IP66/IP67/IP68 degrees of protection guarantee complete protection against bad weather and temporary immersion in water. In addition, the IP69 certification allows camera cleaning with high pressure water jets at high temperature.

Installation of NVX even in tight spaces is facilitated by the quick connectors and the practical, modular support supplied as standard for assembly on walls, ceilings or railings. NVX versions are available with integrated wiper or with a polycarbonate window.

### HIGH QUALITY IMAGE

NVX with SONY FCB-EV7520 camera incorporates a 30x zoom lens and a 1/2.8" Exmor R™ CMOS type sensor with Full HD 1080/60p resolution capable of producing impeccable quality image even for objects in motion and more difficult lighting conditions. The powerful image stabilization algorithm means even the smallest camera vibrations are detected and any blur in the footage is dynamically corrected. This results in a sharp image of the scene being surveilled.

The advanced SONY technology brings Wide Dynamic Range and a configurable High Light Compensation that allows optimal management of contrasting light and dark conditions.

### VIDEOTEC ANALYTICS

The NVX camera with VIDEOTEC ANALYTICS technology integrates very robust algorithms for accurate detection even in the most adverse weather conditions, ensuring the operator complete situational awareness at any time. The detection algorithm is particularly reliable even with rain, snow, vibrations of the camera, low contrast, sudden changes in light or shade and in the presence of small animals or insects.

Based on the rules set by the user, an alarm is generated if an object enters, exits, appears or stays more than necessary inside an area. Any breach of these rules will activate the alarm and the other programmed actions. Up to ten rules per preset can be quickly configured.

VIDEOTEC ANALYTICS provides: maximum efficiency in intrusion detection, reduction of costs and human-induced errors, cuts in storage costs, reduction in the time required to monitor and detect unusual events from recordings, plus a drastic drop in false alarms.

## GEOMOVE AND GEOMOVE&TRACK FUNCTIONS

The new NVX video cameras can be geo-localized on the maps to support the GeoMove and GeoMove&Track features, in combination with one or more Videotec PTZs.

The GeoMove feature is very useful in perimeter surveillance systems and for port traffic control because it lets you capture any target through geographic coordinates, even in critical visibility or offshore conditions.

The GeoMove feature can typically be activated using a NVX camera with Videotec Analytics on board, or through third-party software such as Video Management Software (VMS), which provide the geographic coordinates of a target and use them to guide the Videotec PTZ cameras to capture the target. The coordinates can also be sent in the same way using Vessel Tracking Services (VTS - navigation control services) or using radar control systems.

Furthermore, PTZ video cameras with Videotec Analytics on board can activate the GeoMove&Track feature. In this case, the Videotec PTZ camera that receives the coordinates of the target, thanks to the video analytics, can also recognize and autonomously follow the geo-localized target.

Thanks to GeoMove&Track, the Videotec fixed and PTZ combination offers the advantage of having a complete positioning and tracking solution - all guaranteed by Videotec.

## 100% MADE IN VIDEOTEC

Videotec guarantees the extreme robustness and reliability of all its "all-in-one products" with hundreds of validation tests. Mechanics, electronics, positioning, networking, software and firmware are developed end-to-end by the internal Videotec team, with total know-how of all the network products offered.

At the heart of Videotec's product development is the concept of cyber-sustainability. To help customers protect their video surveillance systems and keep them secure, Videotec provides constant updates, training and support throughout the lifecycle of its products, regardless of how old the device is or whether it is still for sale.

Thanks to digitally signed firmware, password-restricted access, access control, centralised management of certificates and compliance with ONVIF Security Service specifications, Videotec guarantees that all its IP products will have the highest level of security during data transfer and device access.

NVX therefore offers the Videotec warranty of being a reliable platform, that is cyber-safe, future-proof and easily integrated with third party products. The new functions of Videotec video analysis, combined with the high technology and quality of the NVX imagery ensure maximum protection for people, assets and property.

## TECHNICAL DATA

### GENERAL

Simple installation thanks to quick connectors  
Quick configuration and setup

### MECHANICAL

AISI 316L stainless steel construction

Slot for safety chain

Unit weight:

- 4.9kg (10.8lb) (fastening support included)
- 4kg (8.8lb) (fastening support not included)

### HOUSING'S WINDOW

Extra clear glass window

- Thick: 3mm (0.1in)

### ELECTRICAL

Supply voltage/Current consumption:

- 24Vac, 1.32A, 50/60Hz
- 24Vdc, 0.9A

Power consumption:

- 25.2W

### NETWORK

Ethernet connection: 100 Base-TX

Connector: RJ45

### CYBERSECURITY

Digitally signed firmware

Password restricted access (HTTP digest)

Support of various user access levels

Control of accesses IEEE 802.1X

HTTPS cryptography using TLS1.0, TLS1.1, TLS1.2 and TLS1.3

Centralised certificate management

Complies with ONVIF Security Service specifications

### VIDEO ANALYTICS

Highly robust detection algorithms, specifically for outdoor perimeter control.

Targets Classification: People, vehicles, generic objects

Programmable rules for video analysis, VIDEOTEC ANALYTICS (it is possible to rapidly configure up to ten rules for every preset using an intuitive control management interface)

- Line crossing: the target triggers an alarm if it crosses the line in one or both directions
- Entering/leaving area: the target triggers an alarm if it leaves or enters the configured area
- Appearing in area: the target triggers an alarm if it appears inside the configured area
- Loitering: the target triggers an alarm if it stays inside the configured area over the set time

Detection Mask: disables the detection activity in a portion of the image to prevent false alarms

Video Tampering Detection: a specific ONVIF alarm is triggered if the video camera view is obstructed (e.g. spray)

## VIDEO

### Video encoder

- Communication protocol: ONVIF, Profile Q, Profile S and Profile T
- Device configuration: TCP/IPv4-IPv6, UDP/IPv4-IPv6, HTTP, HTTPS, NTP, DHCP, WS-DISCOVERY, DSCP, IGMP (Multicast), SOAP, DNS
- Streaming: RTSP, RTCP, RTP/IPv4-IPv6, HTTP, Multicast
- Video compression: H.264/AVC, MJPEG, MPEG4, snapshot JPEG
- 3 independent video streams Full HD
- Image resolution: from 320x180pixel up to 1920x1080pixel in 8 steps
- Selectable frame rate from 1 to 60 images per second (fps)
- Web Server
- Motion Detection
- Video analytics: VIDEOTECH ANALYTICS
- QoS: Differentiated DSCPs for streaming and device management
- SNMP and NTCIP protocols

## CAMERAS

### SONY FCB-EV7520 Day/Night Full HD 30x

Resolution: Full HD 1080p (1920x1080)

Image Sensor: 1/2.8" Exmor™ R CMOS sensor

Effective Pixels: approx. 2.13 Megapixels

Minimum Illumination:

- Colour: 0.0013lx (50 IRE, High sensitivity on)
- B/W: 0.0008lx (30 IRE, High sensitivity on)

Focal length: from 4.3mm (wide) up to 129mm (tele)

Zoom:

- 30x
- 36x, with Stable Zoom enabled

Digital Zoom: 12x

Iris: from F1.6 up to F14 (Auto, Manual)

Horizontal Viewing Angle: from 63.7° (wide end) up to 2.3° (tele end)

Vertical Viewing Angle: from 38.5° (wide end) up to 1.3° (tele end)

Shutter speed: from 1/1s up to 1/10000s (Auto, Manual)

White balance: Auto, Auto Tracing, Indoor, Outdoor, Manual, Outdoor Auto, Sodium Lamp (Fix/Auto/Outdoor Auto)

Gain: from 0dB up to 50.0dB (Auto, Manual)

Wide Dynamic Range: 120dB

Focus System: Auto (PTZ Trigger, Full Auto), Manual

Picture Effects: E-flip

Noise removal (2D, 3D): Off, On (from level 1 up to level 5)

Exposure Control: Auto, Manual, Priority (Shutter priority, Iris priority, Brightness priority)

De-fog: Off, Low, Mid, High

Privacy zones masking: maximum 8 settable masks

Indoor Flicker Reduction

Gain Limit: from 10.7dB up to 50dB

High sensitivity: On/Off

Backlight Compensation: On/Off

Auto Slowshutter: On/Off

Exposure compensation: Off, On (from -10.5dB up to +10.5dB)

Sharpness: from level 0 up to level 15

High Light Compensation (HLC): Off, Low, Mid, High, Masking Level (Off, On, from level 1 up to level 15)

Digital image stabilization: On/Off

## I/O INTERFACE

I/O alarm board (version with wiper)

- Input for remote reset: 1
- Relay outputs: 1+1 (1 relay reserved for washer pump and one configurable, 1A, 30Vac/60Vdc max)

## ENVIRONMENT

For indoors and outdoors installation

Operating temperature: from -40°C (-40°F) up to +50°C (122°F)

Surge immunity: up to 1kV line to line, up to 2kV line to earth (Class 3)

Relative humidity: from 5% up to 95%

## CERTIFICATIONS

Electrical safety (CE): EN60950-1, IEC60950-1, EN62368-1, IEC62368-1

Electromagnetic compatibility (CE): EN61000-6-4, EN50130-4, EN55032 (Class A), FCC Part 15 (Class A), ICES003 (Class A)

Outdoor installation (CE): EN60950-22, IEC60950-22

IP protection degree (EN60529): IP66, IP67, IP68 (2h30min, 2m (6.56ft)), IP69

EAC certification

NDAA-compliant

## ACCESSORIES

COMB100A	Communication box in polycarbonate, IN from 220Vac up to 230Vac, OUT 24Vac
COMB200A	Communication box in polycarbonate, IN 24Vac, OUT 24Vac
COMB300A	Communication box in polycarbonate, IN from 120Vac up to 127Vac, OUT 24Vac
IRHXXHA	GEKO IRH illuminator, High Power
IRHxxLxA	GEKO IRH illuminator, Low Power
NVXTUB	Dust protection frontal shield
NVXIRBKT	Illuminator fastening support (GEKO IRH)
OHEPOWINJ	Hi-PoE Power Injector, 1 channel, for indoor installations
WASPT0V5L5M00	Water tank 5l (1.3gal), pump with delivery up to 5m (16ft), IN 230Vac-24Vac-120Vac
WASPT0V23L5M00	Water tank 23l (6gal), pump with delivery up to 5m (16ft), IN 230Vac-24Vac-120Vac
WASPT0V23L11M00	Water tank 23l (6gal), pump with delivery up to 11m (36ft) with water floating, IN 230Vac-24Vac-120Vac
WASPT1V23L30M00	Water tank 23l (6gal), pump with delivery up to 30m (98ft) with water floating, IN 230Vac

WASPT3V23L30M00	Water tank 23l (6gal), pump with delivery up to 30m (98ft) with water floating, IN 120Vac
WASN1V10L20M00	Tank 10l (2.6gal) with integrated manual pump, controlled by solenoid valve, IN 230Vac, delivery head up to 30m (98ft), with 20m (66ft) antistatic water delivery pipe
WASN2V10L20M00	Tank 10l (2.6gal) with integrated manual pump, controlled by solenoid valve, IN 24Vac, delivery head up to 30m (98ft), with 20m (66ft) antistatic water delivery pipe
WASN3V10L20M00	Tank 10l (2.6gal) with integrated manual pump, controlled by solenoid valve, IN 120Vac, delivery head up to 30m (98ft), with 20m (66ft) antistatic water delivery pipe

## BRACKETS AND ADAPTORS

UEAP	Pole adaptor in stainless steel AISI 316L
UEAC	Corner adaptor in stainless steel AISI 316L
UEAW	Counter-plate in stainless steel AISI 316L

## PACKAGE

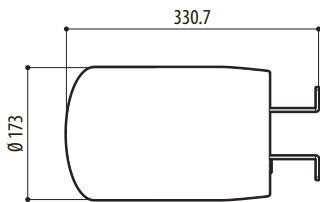
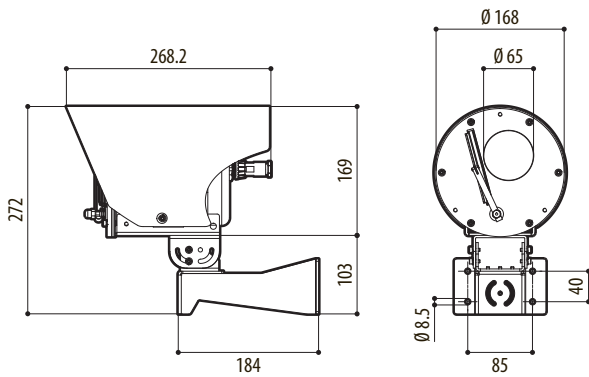
Model Number	Weight	Dimensions (WxHxL)	Master carton
NVX	6.2kg (13.7lb)	36x35x23cm (14x14x9in)	-

## NVX WITH SONY FCB-EV7520 CAMERA AND VIDEOTEC ANALYTICS CONFIGURATION OPTIONS

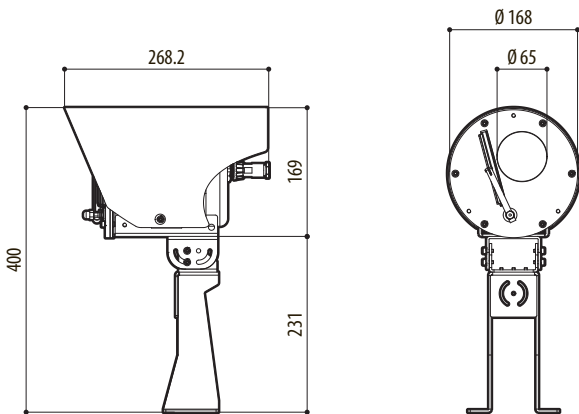
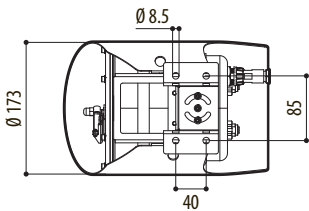
	Voltage	Camera	Versions	Video analytics	Revision
<b>NVX</b>	<b>2</b> 24Vac/24Vdc	<b>20</b> SONY FCB-EV7520 camera, FULL HD 1080p, 30x	<b>W</b> With wiper/Glass window	<b>01</b> With integrated video analytics (VIDEOTEC ANALYTICS)	<b>A</b> Complies with ONVIF, Profile Q, Profile S and Profile T
			<b>S</b> Without wiper/Glass window		

## TECHNICAL DRAWINGS

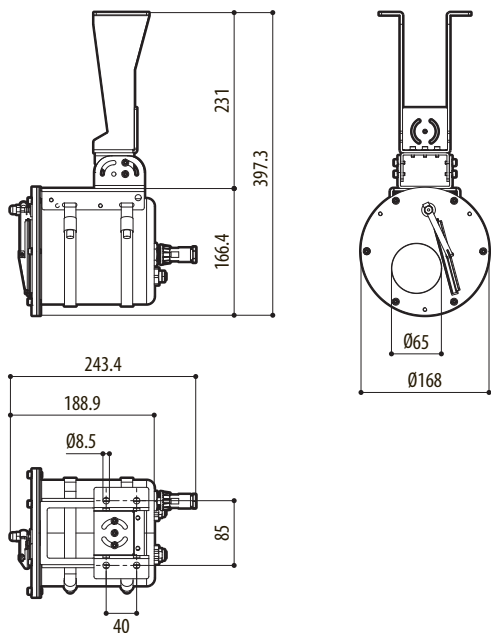
The indicated measurements are expressed in millimetres.



NVX, WALL MOUNTING



NVX, PARAPET MOUNTING



NVX, CEILING MOUNTING