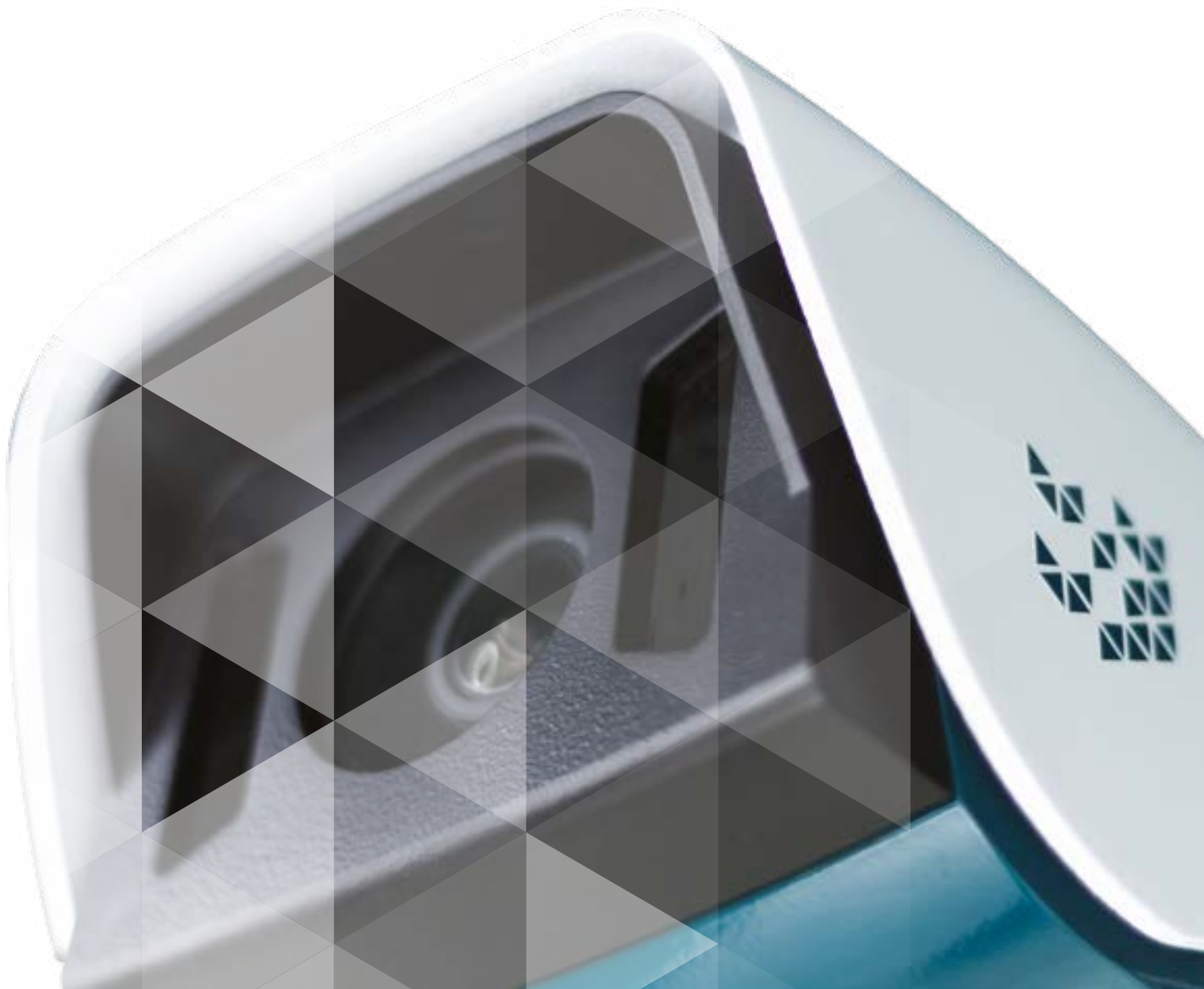




spark

Solutions without compromise





Solutions without compromise

Product Catalogue 2018



spark

Solutions without compromise

Here at **Spark**, we believe in the power of images, the potential of technology and the value of excellence. This is why we can make all the difference to the quality of your video surveillance system.

Spark is more than just a cohesive team of qualified engineers from the field of imaging and video recording systems. We are an innovative technological company, part of the financial holding group **TTM – Top Technology Mission S.p.A.**: a business created from the Marazzi family's vision and tireless entrepreneurial spirit. Financial stability, technological know-how and a focus on excellence are the assets we share with all the group's companies. This means we can provide cutting-edge solutions designed and developed specifically for anyone who runs professional video surveillance services.



Our mission is to provide revolutionary contributions in the video surveillance industry by developing and manufacturing the latest ULTRA HD technology. Only the greatest details are gained by capturing, transmitting and managing images of only the best quality. Accurate, useful and honest information allows to establish an effective and reliable security service.



Headquarters

The city of **Reggio Emilia**, Northern Italy, is considered to be an innovative community with strong economical cohesion. This is exactly where Spark's headquarters is located. Here we host the central functions of the whole company: the board office, sales division, part of the R&D department, production facility, technical support and purchases are all located close together, to maximise efficiency in all our operations.




R & D

Research and Development means everything to us: from the conception of new products to supporting the very first device delivered on the market. Our team of engineers, located on three different sites, (Reggio Emilia and Milan) takes care of Mechanics, Electronics and Software design as well as Product Definition and Validation & Verification activities.



Production



Our production plants, equipped with modern assembly machines for both Electronics and Mechanics, are continuously expanding. Our products are manufactured internally, from assembling to the final functional tests. In order to secure maximum performance when in operation, our production process is continuously subjected to quality checks.



Product line
Pro



UNICA

UNiversal Clever Accessory

Spark has invented, designed and patented an universal mounting mechanism that offers many benefits for the user. The UNICA backplate allows quick and safe support and connection for our Pro-line cameras.

Professional

UNICA is equipped with an internal memory that retains all the relevant settings of the camera, in order to create the shortest off-time.

In the event of replacement due to the demand for another solution for example, the new camera will start working as soon as it is connected, without further intervention by the operator.



Easy

Installation of the UNICA backplate on poles, ceilings and walls, is a very simple operation thanks to Spark's Fast Lock System. Special tools or expertise have become unnecessary luxuries.



Versatile

All product models from our Professional series are interchangeable. UNICA can hold either the bullet- or dome- as well as the PTZ model.

This unique feature ensures maximum flexibility of choice because a camera can be replaced with a different model without additional costs or labor.

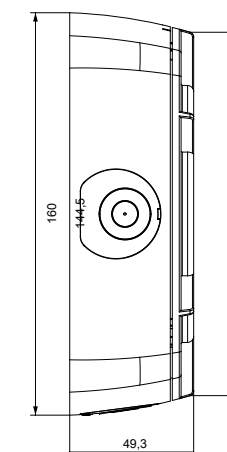
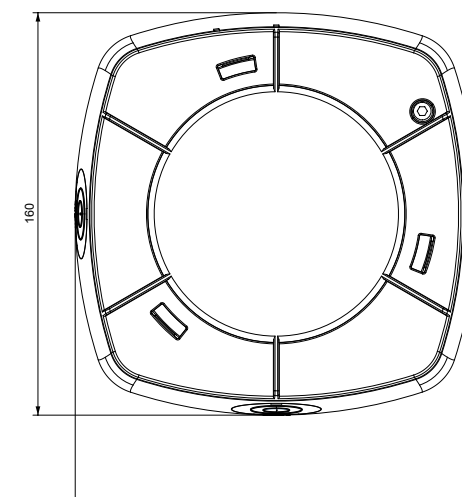


UNICA features

Dimension	160 x 160 x 49,3 mm
Weight	0.6 Kg
Housing	Diecast aluminium
Impact resistant	IK10 when connected to the cameras
Ingress protection	IP66 when connected to the cameras
Fast mounting	UNICA Secure and fast Lock

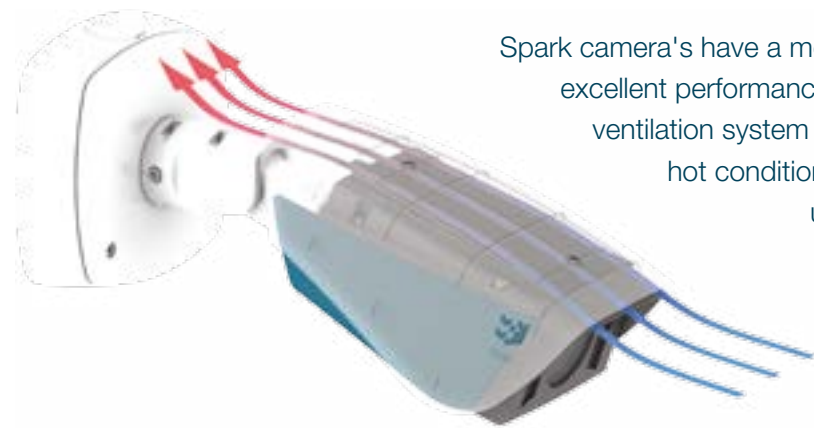
Standard features

System recovery	In site Embedded EEPROM configuration
I/O	Optocoupled input (3Kv), 1 relè output (24Vdc 2A) (terminal Block)
Power	PoE IEEE 802,3af max. 12,9W ; PoE IEEE802.3at max. 25W ; 12Vdc 25W
Serial Connector	RS485 Half duplex (terminal Block)
Audio Connector	Terminal Block
Power DC Connector	Terminal Block
Edge storage	MicroSD/microSDHC/microSDXC
Operating temperature	-40°C, +60°C
Approvals	EN 55032 (2015-07) EN 55024 (2010-11) + A1 (2013) EN 50130-4 (2011-06) + A1 (2014)





NATURAL VENTILATION



Spark camera's have a modern Italian design and it's also conceived to give excellent performance in the most hostile of environments. The passive ventilation system significantly improves camera performance in very hot conditions, 60°C. In order to prevent the front part fogging up phenomena due to temperature change, Spark uses a **GORETEX®** valve that allows to keep internal pressure constant, while avoiding internal humidity.

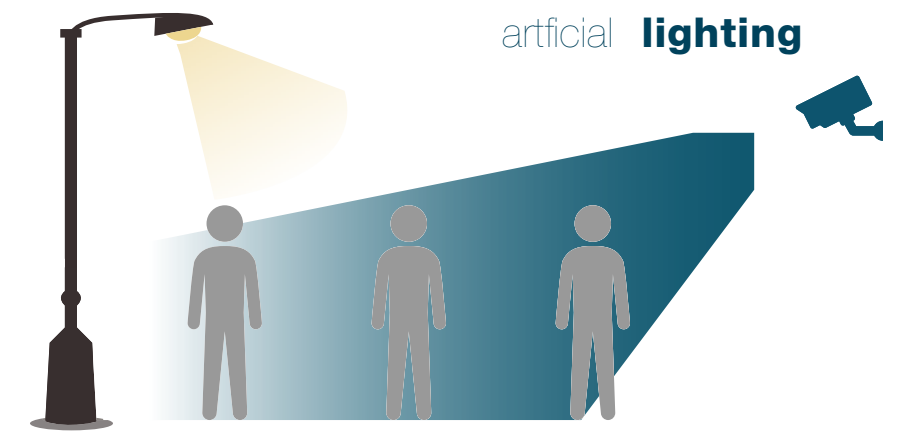


VANDAL PROOF

Spark has invested in the materials used in its casings, in order to give TOTAL security. The casings, made entirely in aluminium at thicknesses of up to 5 mm, ensure unparalleled resistance to shock and vandalism.



DAY&NIGHT VISION



no IR

For all installations in sites with artificial lighting, a version without a built-in lighting system is available. The camera still has the day/night features with automatic filter, to optimise image quality with changes in lighting conditions. Spark's cameras provide very low light sensitivity (**Starlight** class) that allows color detection even in dark conditions.

smart IR

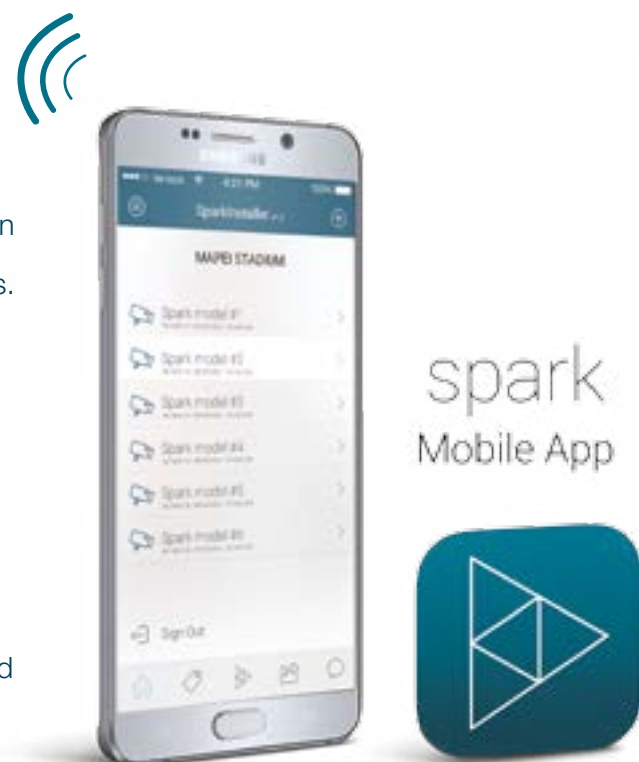
Smart IR always guarantees correct lighting of the subject monitored, regardless of distance from the camera. The system modulates the power of individual LEDs, driven by an algorithm which can recognise the position of the subject. The integrated illuminator consists 6 high-power LEDs with progressive opening angle lenses. Furthermore, the field of illumination adjusts according to the focal length of the lens. Smart IR by Spark features an impressive depth of illumination, up to 50 m in normal conditions.

improved image



MOBILE APP ^{* in preparation}

Spark is developing an mobile app to integrate in all cameras. This WIFI interface is designed exclusively for the installation phase. Once installation is complete, the device switches off automatically, ensuring maximum security of the video surveillance network. Using the dedicated app, the installer can scan the network and connect to a particular camera. Once the connection is established, the installer can watch live streaming or adjust the base optical parameters, including the automatic focus option. The smartphone app (Android/iOS) facilitates rapid and economical positioning and calibration of the camera. The system is designed to allow a single installer to configure the camera independently.



INVESTMENT PROTECTION

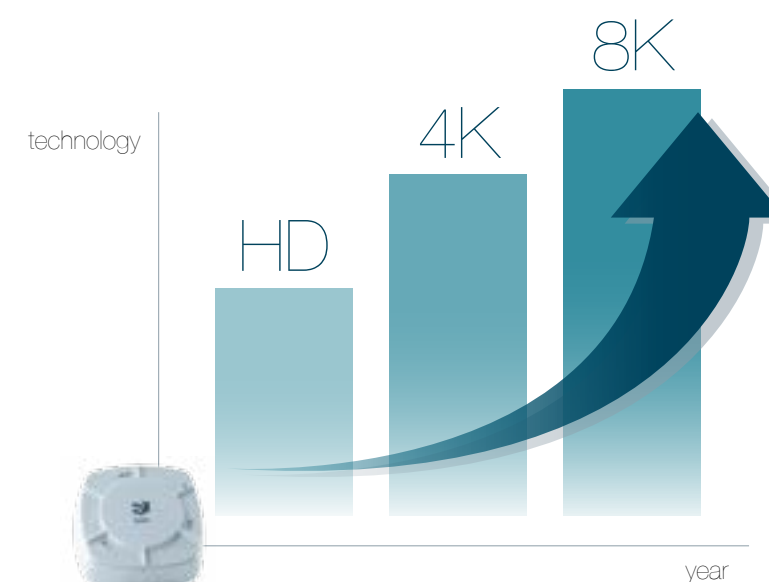
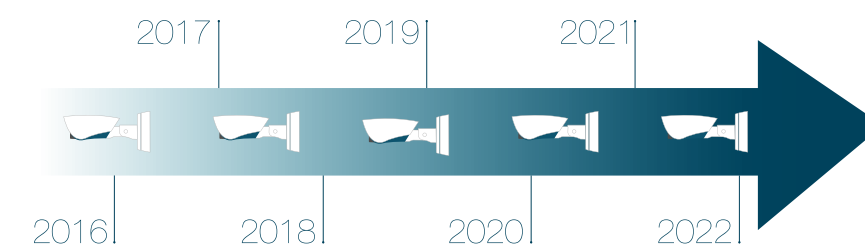


aesthetic **impact**

Italy is recognized as being a worldwide trendsetter and leader in design. Spark cameras have been designed and developed, looking beyond the traditional limits of shape and function. Despite of creating the ultimate user experiences, we also focus on meticulous product details. We proudly express the usage of intelligence also in the aesthetics of our cameras.

availability over time

Spark guarantees long-term availability of its products in order to safeguard its clients' investment for as long as possible. Spark's "Industrial" range offers up to 7 years' availability on cameras and parts.



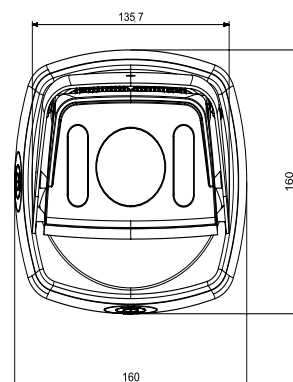
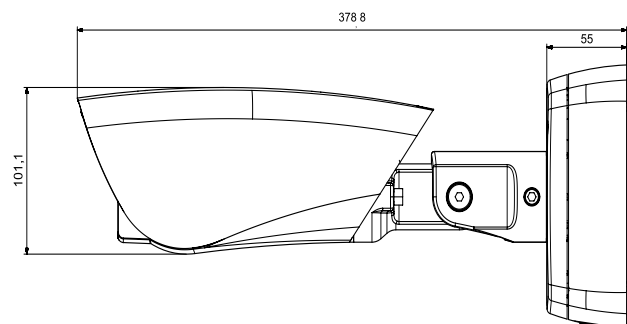
immediate upgrade

The Spark production strategy is developed to retain great versatility with regular upgrades. The purchase of increasingly powerful cameras are using the same mounts and configurations in order to improve your security system step-by-step.

Kiara Series



KIARA series presents the new 4K bullet IP camera. Like the 2 and 5 megapixel cameras, it combines **modern functional design** and technical features for multiple applications, all in a robust casing, **MADE IN ITALY**. KIARA cameras using **Smart IR**, high sensitivity in low lighting conditions, an extremely high frame rate and can be classified with excellent mechanical robustness in order to function in almost every condition. **ONVIF** compatibility makes integration in third-party solutions easy.



Cameras features			
Camera type	KIARA 2000	KIARA 5000	KIARA 8000
Product code	SR-C-S2-KIARA-V12-IR	SR-C-S5-KIARA-V10-IR	SR-C-S8-KIARA-V10-IR
Image sensor	CMOS progressive Scan 1/2,8"	CMOS progressive Scan 1/1,8"	CMOS progressive scan 1/2,5"
Electornic shutter	1/2s – 1/10000s		
Min. illumination	0.001Lux @ F1.6(Color) 0.0001Lux@ 1.6(B/W)	0.05 lux @ F1.5 (color) 0.005 lux @ F1.5 (B/W)	
Lens	2,8-12mm F1.4 - optical FOV: 33°-104°	3,6-10mm F1.5 - optical FOV: 38°-85°	4,0-10mm F1.5 optical FOV
	Varifocal, Autofocus, Remote focus and zoom, P-Iris control, IR corrected		
Lens Variant	7-22mm F1.4 - optical FOV: 14°-43° Varifocal, Autofocus, Remote focus and zoom, P-Iris control, IR corrected		
Lens VARIANT CODE	SR-C-S2-KIARA-V22-IR		

Video	KIARA 2000	KIARA 5000	KIARA 8000
Night infrared	IR corrected, IR cut filter removable, IR illuminator adaptive (up to 50 mt)		
Video compression	H.265,H.264 high profile (MPEG 4 Part 10/AVC) Motion JPEG		
Resolution	Up to 1920x1080	Up to 2560x1920	Up to 3840 x 2160
Frame rate	Up to 60 fps (WDR off) Up to 30 fps (WDR on)	Up to 30 fps	
Bitrate Video	256 Kbps - 30Mbps		
WDR	120 dB	100 dB	
Streaming protocol	RTP/HTTP, RTP/TCP, RTP/UDP, Multicast, Unicast, RTSP		
Streaming mode	More 'video streams individually configurable frame rate and wide bandwidth controllable		
Image settings	3D Denoise, Brightness, Color, Compression, Defog, Exposure control, Flip, Manual shutter time, Mirroring of images Rotation: 90, 270, Privacy masks ROI, Sharpness, Text and image overlay, White balance		
Night color Variant	Light illuminator		
Night color VARIANT CODE	SR-C-S2-KIARA-V12-WL	SR-C-S5-KIARA-V10-WL	SR-C-S8-KIARA-V10-WL

Network	
Security	Password protection , HTTPS encryption
Network protocols	ARP, DHCP, DNS, FTP, HTTP, HTTPS, ICMP, IPv4, IPv6, NTP, ONVIF Profile S, RTCP, RTSP, SMTP, TCP, UDP, DYNDNS, Bonjour, UPnP

Audio	
Audio	Two-way full duplex
Audio compression	G.711 U law, a law, g.726, Amr
Audio connectors	Line input, line output

System integration	
Analytics	Tripwire detection, perimeter detection, tampering detection, people density
Event triggers	Detecting moving objects, audio detection, link loss of network, event planning
Event actions	File upload: ftp, sftp, http, https network share and emai Notification: email, http, https and tcp and snmp trap external output activation
Built-in installation	Remote zoom, remote focus, auxiliary wifi connection configuration (device mode)
Mobile App	Android, IOS * in preparation
Data streaming	Video stream, event data

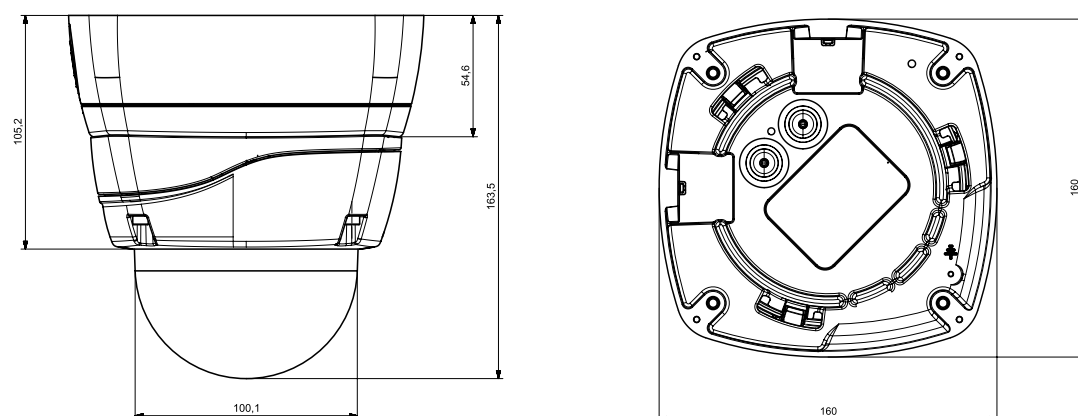
Standard Features	
Dimension	379x101x136 mm
Weight	2.5 Kg
Housing	Diecast aluminium, Plastic, Polycarbonate
Impact resistant	IK10
Ingress protection	IP66
Anti condensation valve	GoreTEX ®
Memory	RAM 512MBytes ,Flash 32Mbytes
Network connector	10/100 RJ45 PoE
I/O	2 optocoupled input (3KV), 1 relè output (24Vdc 2A)
Power	PoE IEEE 802.3af max. 12,9W, PoE IEEE802.3at max. 25W, 12Vdc 25W
Serial connector	RS485 Half duplex
Power connector	Terminal Block
Operating temperature	-40°C, +60°C IR illuminator turn off if temperature is 45° or higher
Minimum starting temperature	-20°
Approvals	EN 55032 (2015-07) EN 55024 (2010-11) +A1 (2013) EN 50130-4 (2011-06) + A1 (2014)
Language	Italian, English more language packs on request

UNICA	
Edge storage	MicroSD/SDHC-SDXC up to 128GB
Event actions	Video recording to edge storage
Installation method	SPARK fastlock
System recovery	Embedded EEPROM
Wall mount	UNICA

Mira Series



MIRA is Spark's Italian made, dome camera. It's robust design contains multiple advantages. To mention a few, it's compatible with our UNICA system and suitable for in- and outdoor installations. MIRA is available in a variety of resolutions ranging from 2 or 5 megapixel up to 4K, all with image analysis on edge. The integrated smart lighting technology, with radiant intensity modulation based on the subject's distance from the camera, allows contrasting images even at night. Installation is simplified, using a standard **WiFi** module. Optical variants are all motorized to provide a simple configuration. Thanks to the **ONVIF** compatibility, Mira is easily integrated with third-party solutions.



Cameras features			
Camera type	MIRA 2000	MIRA 5000	MIRA 8000
Product code	SR-C-S2-MIRA-V12-IR	SR-C-S2-MIRA-V12-IR	SR-C-S8-MIRA-V10-IR
Image sensor	CMOS progressive Scan 1/2,8"	CMOS progressive Scan 1/1,8"	CMOS progressive scan 1/2,5"
Electronic shutter	1/2s – 1/10000s		
Min. illumination	0.001Lux @ F1.6 (Color) 0.0001 Lux @ 1.6 (B/W)	0.05 lux @ F1.5 (color) 0.005 lux @ F1.5 (B/W)	
Lens	2,8-12mm F1.4 - optical FOV: 33°-104°	3,6-10mm F1.5 - optical FOV: 38°-85°	4,0-10mm F1.5 optical FOV
	Varifocal, Autofocus, Remote focus and zoom, P-Iris control, IR corrected		
Lens Variant	7-22mm F1.4 - optical FOV: 14°-43° Varifocal, Autofocus, Remote focus and zoom, P-Iris control, IR corrected		
Lens VARIANT CODE	SR-C-S2-KIARA-V22-IR		

Video	MIRA 2000	MIRA 5000	MIRA 8000
Night infrared	IIR corrected, IR cut filter removable, IR illuminator adaptive (up to 50 mt)		
Video compression	H.265,H.264 high profile (MPEG 4 Part 10/AVC), Motion JPEG		
Resolution	Up to 1920x1080	Up to 2560x1920	Up to 3840 x 2160
Frame rate	Up to 60 fps (WDR off) Up to 30 fps (WDR on)	Up to 30 fps	
Bitrate Video	256 Kbps - 30Mbps		
WDR	120 dB	100 dB	
Streaming protocol	RTP/HTTP, RTP/TCP, RTP/UDP, Multicast, Unicast, RTSP		
Streaming mode	More 'video streams individually configurable frame rate and wide bandwidth controllable		
Image settings	3D Denoise, Brightness, Color, Compression, Defog, Exposure control, Flip, Manual shutter time, Mirroring of images Rotation: 90, 270, Privacy masks ROI, Sharpness, Text and image overlay, White balance		
Night color Variant	Light illuminator		
Night color VARIANT CODE	SR-C-S2-KIARA-V12-WL	SR-C-S5-KIARA-V10-WL	SR-C-S8-KIARA-V10-WL

Network	
Security	Password protection , HTTPS encryption
Network protocols	ARP, DHCP, DNS, FTP, HTTP, HTTPS, ICMP, IPv4, IPv6, NTP, ONVIF Profile S, RTCP, RTSP, SMTP, TCP, UDP, DYNDNS, Bonjour, UPnP

Audio	
Audio	Two-way full duplex
Audio compression	G.711 U law, a law, g.726, Amr
Audio connectors	Line input, line output

System integration	
Analytics	Tripwire detection, perimeter detection, tampering detection, people density
Event triggers	Detecting moving objects, audio detection, link loss of network, event planning
Event actions	File upload: ftp, sftp, http, https network share and email Notification: email, http, https and tcp and snmp trap external output activation
Built-in installation	Remote zoom, remote focus, auxiliary wifi connection configuration (device mode)
Mobile App	Android, IOS; in preparation
Data streaming	Video stream, event data

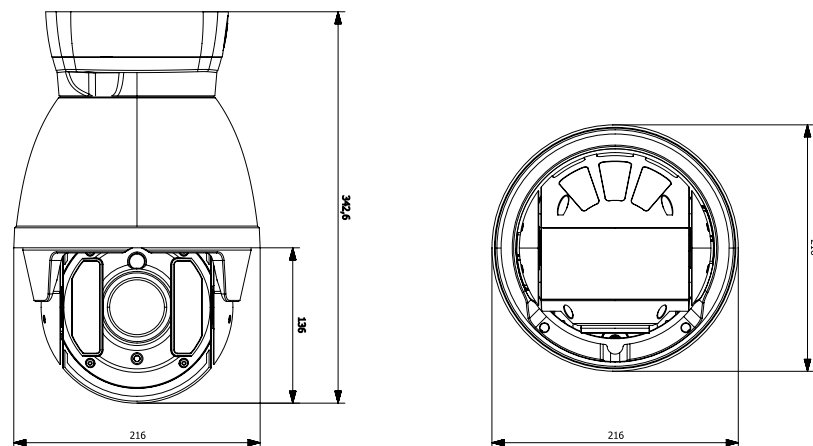
Standard Features	
Dimension	160x160x160 mm
Weight	1.5 Kg
Housing	Diecast aluminium, Plastic, Polycarbonate
Impact resistant	IK10
Ingress protection	IP66
Memory	RAM 512MBytes ,Flash 32Mbytes
Network connector	10/100 RJ45 PoE
I/O	2 optocoupled input (3KV), 1 relè output (24Vdc 2A)
Power	PoE IEEE 802.3af max. 12,9W, PoE IEEE802.3at max. 25W, 12Vdc 25W
Serial connector	RS485 Half duplex
Power connector	Terminal Block
Operating temperature	-40°C, +60°C IR illuminator turn off if temperature is 45° or higher
Minimum starting temperature	-20°C
Approvals	EN 55032 (2015-07) EN 55024 (2010-11) +A1 (2013) EN 50130-4 (2011-06) + A1 (2014)
Language	Italian, English more language packs on request

UNICA	
Edge storage	MicroSD/SDHC-SDXC up to 128GB
Event actions	Video recording to edge storage
Installation method	SPARK fastlock
System recovery	Embedded EEPROM
Wall mount	Smart UNICA

Lumina Series



LUMINA One of the most important characteristics is already exposed by the Latin-/Germanic meaning of its name: **‘Luminous people’**. Differences of lightning conditions are being handled with its professional **WDR** function. It guarantees excellent night-time images thanks to the SmartIR correction wich automatically adjusts the IR illuminators. UNICA adaptability makes also LUMINA a true **PROFESSIONAL PTZ** camera.



Cameras features	
Camera type	LUMINA 2000
Product code	SR-C-S2-LUMINA-V135-IR
Image sensor	CMOS starlight Scan 1/2,8"
Electornic shutter	1/2s - 1/30000s
Min. illumination	0.001Lux @ F1.6 (Color) 0.0001Lux @ F1.6 (B/W)
Lens	4.5 - 135mm, F1.6 (W) - F4.4 (T) optical FOV: 2.02° - 57°
Zoom	30x Optical Zoom

Video	
Day & Night	Mechanical IR cut filter, Light sensor
Video compression	H.265,H.264 high profile, main profile, baseline,Motion JPEG
Resolution	Up to 1920x1080
Frame rate	Up to 30 fps
Bitrate Video	256Kbps - 10Mbps
WDR	120 dB
Streaming protocol	Unicast, Multicast, RTSP
Streaming mode	More 'video streams individually configurable frame rate and wide bandwidth controllable
Image settings	Rotation: Mirrow, Flip, Mirror Flip, Brightness, Contrast, Saturation, Sharpness; Overlay Capabilities: time, date, text and privacy image, ROI, white balance (auto/manual)
Night infrared	IR illuminator adaptive (up to 150 mt)

Network	
Security	Multiple user access levels with password protection, HTTPS encryption
Network protocols	IPv4, IPv6, Bonjour, TCP/ IP, DHCP, DNS, DynDNS, PPPoE, ARP, ICMP, FTP, SMTP, NTP, UPnP, RTSP, RTP, RTCP, HTTP, HTTPS, SSL, TCP, UDP, Bonjour, UPnP

System integration	
Analytics	Audio detection, tampering detection
Event triggers	Alarm input, motion detection, audio detection, periodical, network link down
Event actions	Network storage, edge storage, FTP, SMTP, HTTP event, HTTPS, alarm out pre and post event image.
Built-in installation	Remote zoom, remote focus, auxiliary wifi connection configuration (device mode)
Mobile App	Android, IOS
Data streaming	Video stream, event data

Audio	
Audio	Two-way full duplex
Audio compression	G.711 A
Audio connectors	RCA

Standard Features	
Dimension	216x379.5 mm
Weight	6.7 kg excl. power supplly
Housing	Aluminum alloy
Ingress protection	IP66
Memory	RAM 512MBytes ,Flash 32Mbytes
Network connector	10/100 RJ45 PoE
I/O	Terminal block, - 24V DC, + 24V DC, GND Power consumption: Max 36W
Power	PoE IEEE802.3at max. 25W 12Vdc 36W
Serial connector	RS485 Half duplex
Power connector	Terminal Block
Operating temperature	-40°C, +60°C
Minimum starting temperature	-20°C
Approvals	CE, FCC, RoHS
Language	Italian, English more language packs on request

UNICA	
Edge storage	MicroSD/SDHC-SDXC up to 128GB
Event actions	Video recording to edge storage
Installation method	SPARK fastlock
System recovery	Embedded EEPROM
Wall mount	UNICA

VIDEO ANALYTIC

VA is a video analytics feature embedded into cameras, designed to make surveillance smarter and efficient.

ADVANTAGES OF VIDEO ANALYTICS



PREVENT POTENTIAL THREATS AND ACCIDENTS

Alerts of predefined events can help enhance safety and security structure.



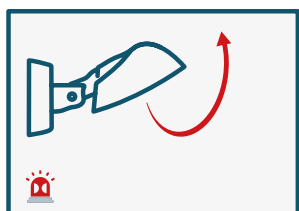
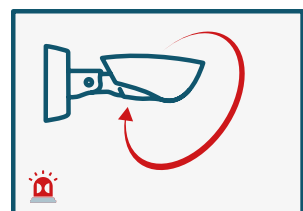
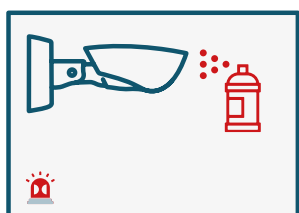
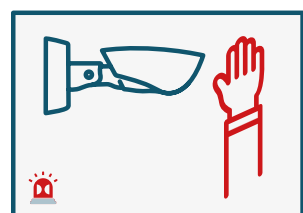
IMPROVE MONITORING EFFICIENCY

Eliminates the inherent disadvantages that a security guard might face, such as limited attention span, interruptions, distractions and fatigue.



COST EFFECTIVE

Video analytics can reduce personnel costs by increasing the number of video streams that can be handled per security guard



TAMPERING DETECTION

Detects unwanted manipulation of the camera, triggering alarm when the view is obstructed or changed.

Enable this feature when the camera is installed in an easily accessed area to avoid intruders from sabotaging the camera or the video recording.

TRIPWIRE DETECTION

Tripwire Detection is a powerful tool that protects your systems against unwanted changes. It triggers an alarm when a person or object crosses the predefined virtual line(s). This feature is useful for installations where physical security is impossible.

Prevent intrusions and accidents by applying tripwire detection lines in restricted zones.



PERIMETER DETECTION

Provides an early warning of intrusions on properties and restricted areas.

The alarm activates when a suspect crosses the defined perimeter.

Effectively detects suspicious activities without the need of a security guard patrolling.

PEOPLE DENSITY

People Density generates notification of overcrowding users in the default area.

This function is important to determine the maximum occupancy of an area. It can serve different purposes depending on the application you are using.



Product line **Nitida**

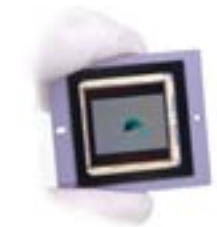
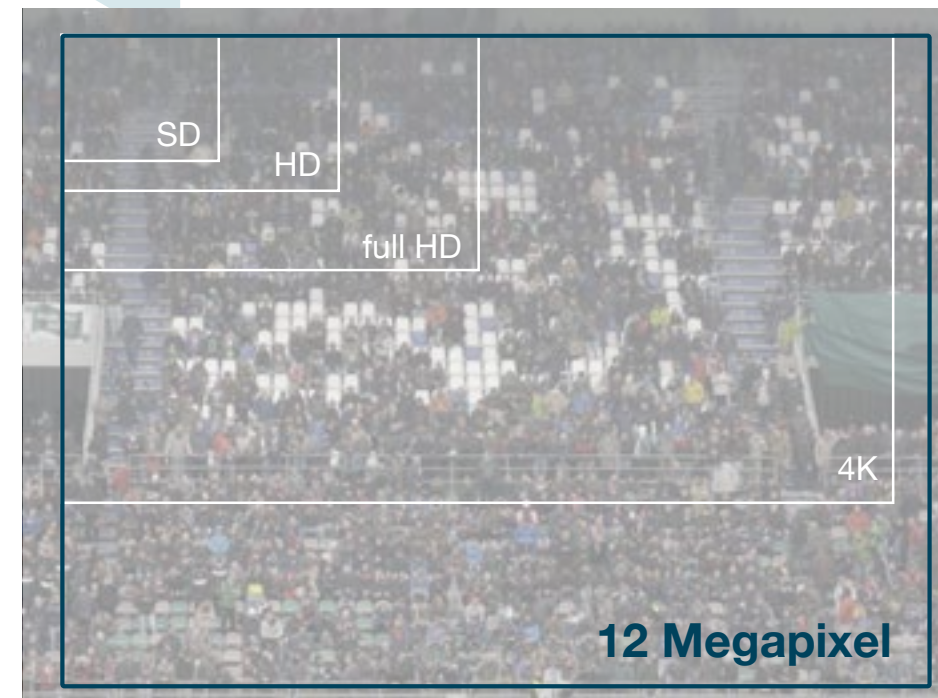
large areas
and **details**
at the same time



Nitida Plus



NITIDA **RESOLUTION**



PROFESSIONAL
SENSOR



PROFESSIONAL
LENS

BIT **RATE**

Spark improves the compression rate of Nitida images with high quality storage and additional details in all frames for the best evidence.

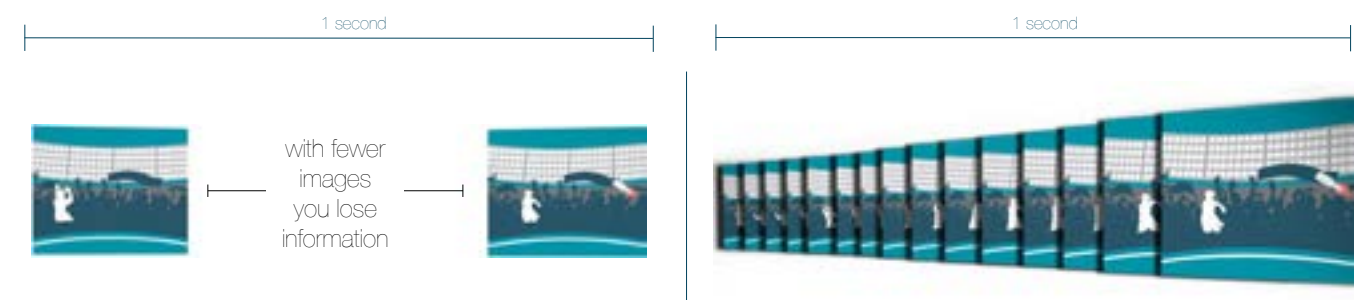
NITIDA is equipped with professional grade image **sensors**, giving a high level of responsiveness, definition, colour, dynamic range and resolution.



The optical system is completed by choosing professional **lenses**: top quality, robust materials, high brightness, no distortion, no optical aberrations and supplementary automatic control.

NITIDA **FRAME RATE**

NITIDA combines high resolution and image definition with a large number of images per second. More images per second allows you to identify each action as it occurs with greater detail.



"high frame rate to identify the actions"

NITIDA NIGHT VISION



The Nitida cameras are among the very few day & night cameras that are able to operate in low light conditions. Depending on the chosen model, the camera is equipped with either an Infrared Cutoff Filter, or a specifically designed sensor to operate in ultra-low light conditions. Either way, round-the-clock operation is ensured by a single camera, without the need to operate a different model for day and night time.

NITIDA BANDWIDTH

LOW BANDWIDTH

No loss of detail with its transcoding system for live and playback mode. NITIDA is the first Ultra HD camera that requires the bandwidth of a normal Full HD camera. The ideal for Ultra HD implementation in new and existing networks infrastructure.

REMOTE CONTROL



Ultra HD LIVE STREAMING

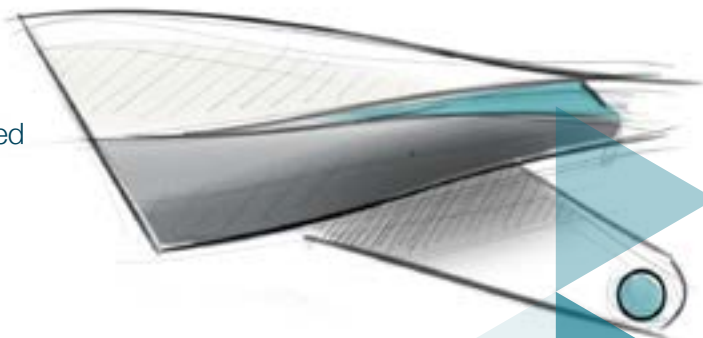
Spark's Nitida architecture makes it possible to control the data flow and the bandwidth consumption. You are able to define how to send the entire live video flow: UltraHD stream in case of performing band, or a crop of UltraHD image (preferred zoom area), if bandwidth availability is low. Even in this case you will have maximum definition remotely, while continuing to record the entire Ultra HD flow.

NITIDA DESIGN

In order to offer truly innovative, carefully designed solutions that boast peerless performance, we have chosen the only possible route:

QUALITY WITHOUT COMPROMISE.

Here at Spark we combine functionality with attractive design.



NITIDA EDGE STORAGE

ULTRA HD ON BOARD

In order to create more flexibility in recording video, Nitida provides a low compression in edge recording with up to 2 TB of storage capacity. High Peak Signal-to-Noise Ratio guarantees only the best image quality.



NITIDA MANAGEMENT SOFTWARE

ARCHIVE & LIVE MANAGEMENT

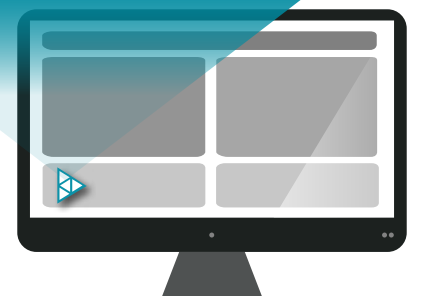
smooth & enjoyable

Nitida's management software exploiting the camera's full potential; live stream management at any resolution, full control of the local archive, instant access to the Virtual PTZ feature, easy and quick image search, footage exports and support for touch interface.



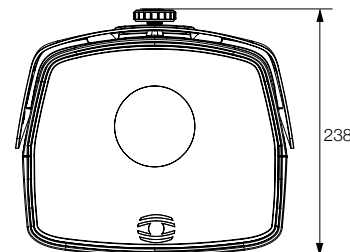
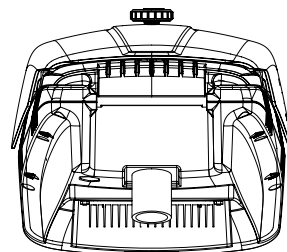
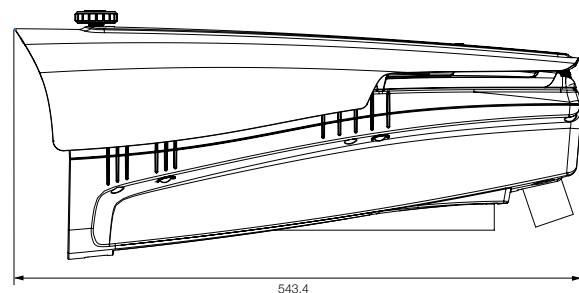
OPEN PLATFORM PLUGIN

Spark provides Application interface and technical support to ensure full access to UltraHD technology using your preferred VMS. The integration process is simplified by this feature's availability, without extra costs. Spark's software plug-in gives your VMS the ability to quickly leverage on NITIDA's full potential.





NITIDA 12000



Cameras features	
Camera type	NITIDA 12000
Product code	SR-C-U56600-S
Image sensor	CMOS 4/3"
Electornic shutter	1/2 - 1/30000
Min. illumination	1 Lux @F1.5
Mount	Canon EF-S
Focus	Auto, Manual

Video	
Day & Night	Automatic removable IR cut filter
Video compression	H.264 high profile (MPEG-4 Part 10/AVC), Motion JPEG
Resolution	Floating window/HD: 1920x1080, 1680x1050, 1440x1080, 1600x900, 1280x1024, 1440x900, 1280x960, 1440x810, 1360x768, 1280x800, 1152x864, 1280x768, 1280x720, 1024x768, 960x720, 1024x576, 960x540, 800x600, 768x576, 800x450, 768x432, 640x480, 640x360
	Web: 960x540, 800x600, 768x576, 800x450, 768x432, 640x480, 640x360, 480x360, 512x288, 384x288
	UltraHD: 4000x2992
	Thumbnails: 384x288, 384x216, 320x240, 320x200
Frame rate	Up to 30 fps
Bitrate Video	256Kbps - 300Mbps
Streaming protocol	RTP/HTTP, RTP/TCP, RTP/UDP, Unicast, RTSP
Streaming list	Floating window FullHD (up to 2) Full frame FullHD (up to 2) Web Full frame (up to 4) Full frame 12MPX
Image settings	Manual shutter time, Compression, Color, Brightness, Sharpness, White balance, Exposure control, Mirroring of images Rotation: Flip, Mirror, Denoise

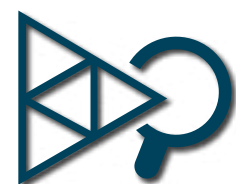
Network	
Security	Password protection
Network protocols	IPv4, TCP/ IP, DHCP, DNS, ARP, ICMP, FTP, SMTP, NTP, RTSP, RTP, RTCP, HTTP, SSL, TCP, UDP

System integration	
Application Programming Interface	(API) open APIs for integration into third-party software.

Standard Features	
Dimension	670 x 350 x 270 mm
Weight	5,5 Kg
Housing	High performance plastic
Impact resistant	IK10
Ingress protection	IP66
Anti condensation valve	GORETEX ®
Memory	RAM 2x1GBytes ,Flash 2x512Mbytes
Network connector	2 x10/100/1000 RJ45
Voltage input	12Vdc (power supply not included)
Power consumption	40W
Power connector	Terminal Block
Wall mount	Included
Edge storage	2 x SATA SSD (optional) up to 2TB total
Operating temperature	-40°C, +50°C
Approvals	EN 55032:2012-05 EN 50130-42:2011-06
Management software	Spark client
Language	Italian, English - more language packs on request

NITIDA MANAGEMENT software pack

Nitida Series is an easy-to-use client applications software suite that handles UltraHD streams, edge-recording and all special features provided by Spark's Nitida line of cameras. It automatically recognizes any touch-screen monitors connected to the client computer.



spark device manager

For the easy identification of all available cameras online, Spark manager is the discovery tool for the Nitida line of cameras.



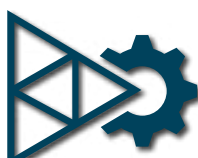
NITIDA PLUGIN

The Nitida Plugin manages Ultra HD and 4K video streams. It allows the user to quickly access and examine with accuracy an event. By offering support for low-speed networks and remote connections, it minimises bandwidth occupied by video streams. The Nitida Plugin provides standard protocol software adapter for the integration of third party software.



NITIDA DASHBOARD

Nitida Dashboard is the application dedicated to large system installations. With a single click, it provides batch operations capability to execute various operations in parallel on several cameras.

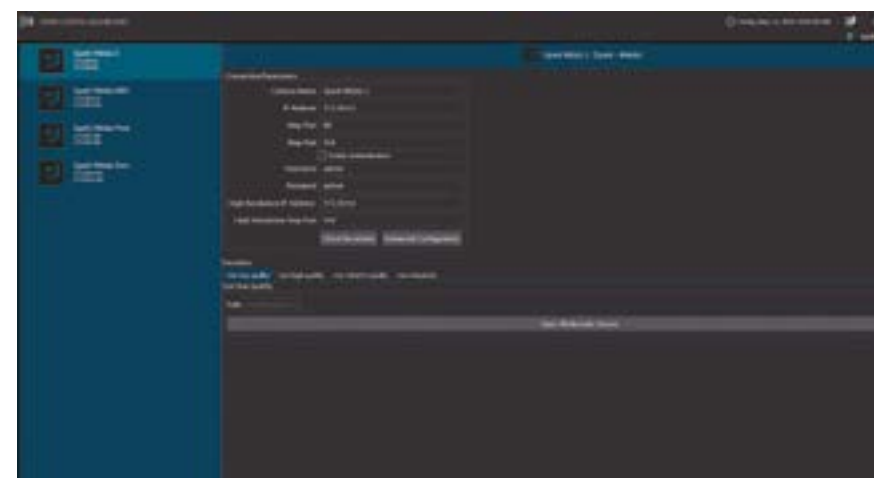


NITIDA CONFIG DASHBOARD

Spark Config.Dashboard provides a quick, interactive, easy way to set up the Nitida Dashboard application. This application gives administrator users all the necessary tools to configure the system and assign users with access and roles.



NITIDA CONFIG DASHBOARD

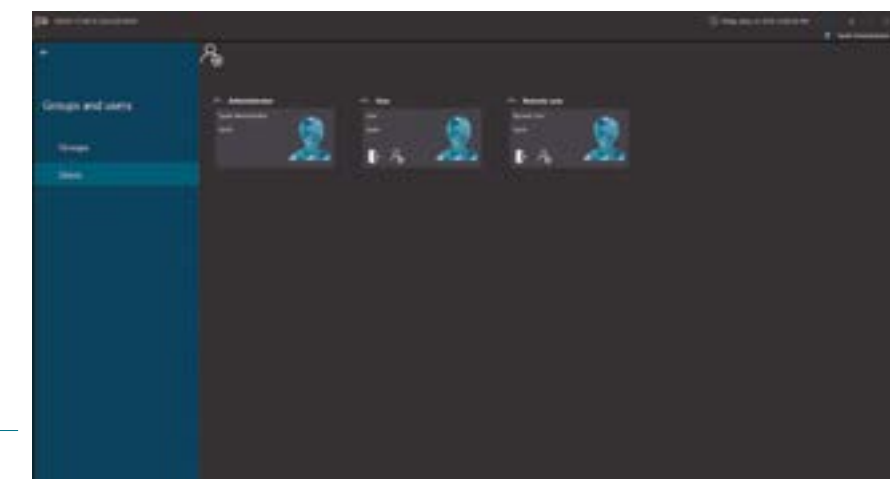


configuration

Configure the system with a few clicks, Spark Config.Dashboard provides facilities to back up, export and import system configuration and logs, and modifies the cameras list within the system.

users manager

System Administrators can easily manage users' access and permission by setting up group permits and limiting access to some. Spark Dashboard features certain user groups.



NITIDA DASHBOARD

export

Using the wizard allows you to export an event from several cameras in a few steps. Nitida Dashboard automatically (re)establishes connection to ensure that the export process contains all video images from the camera's edge recording archive. It guarantees connection to the camera also in the event of a technical failure. For example due to an unstable connection between the cameras and the client.

scheduling

Schedule recording events on several cameras with edge recording. By using the interface the user is able to quickly create a time interval to be monitored.

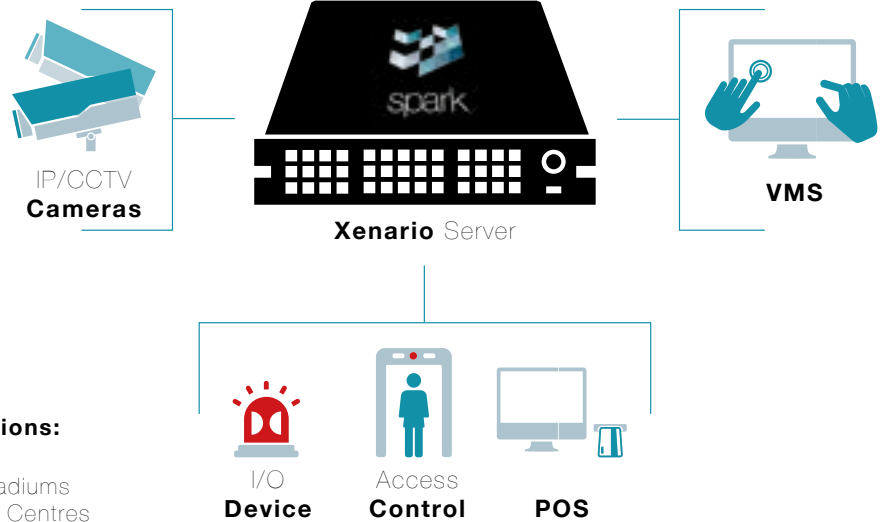




Xenario

Client

The system architecture is modular, scalable and supports failover policies to ensure maximum reliability. This is what Spark calls a solid security system.



SMALL Systems

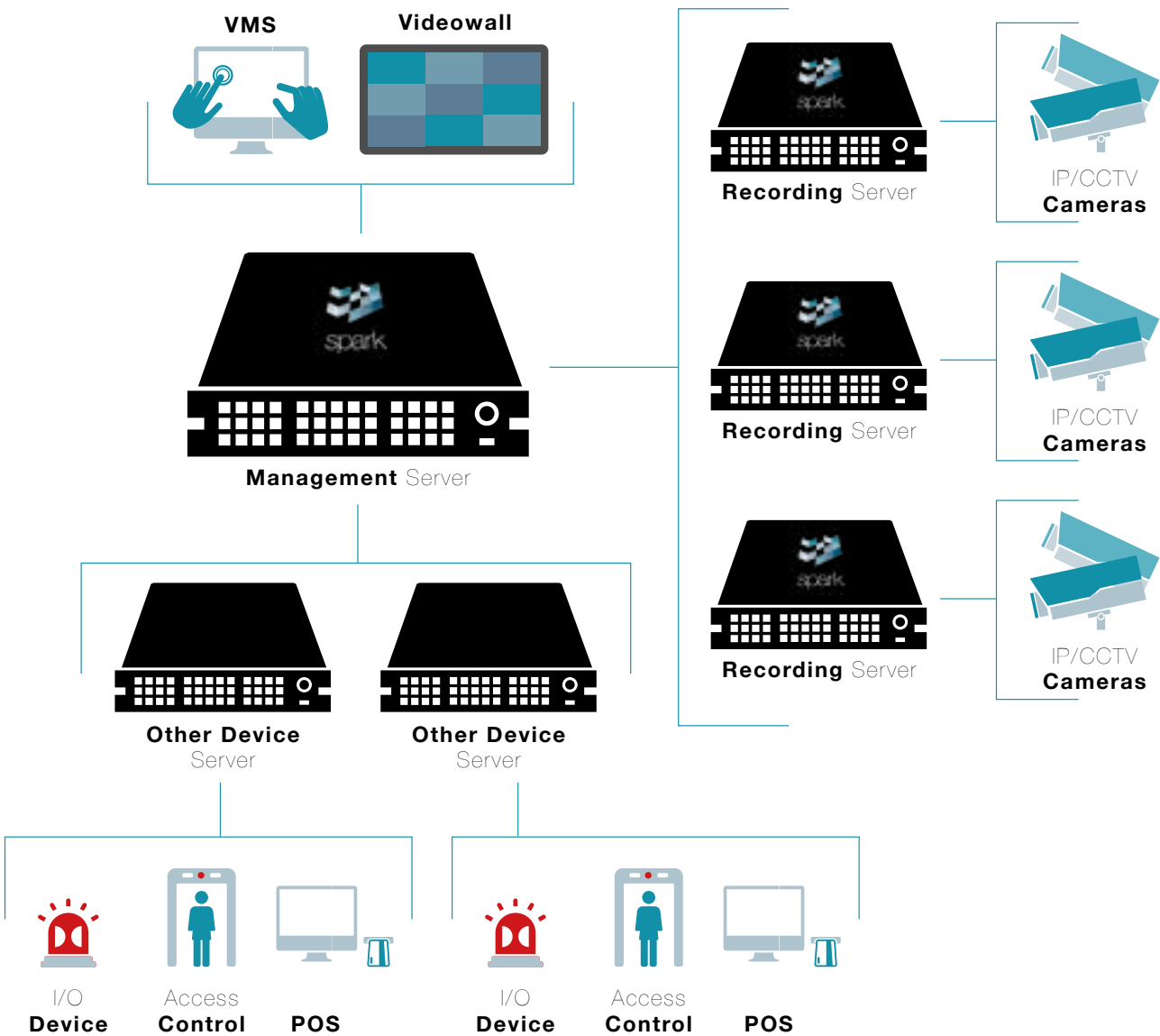
Applications:
Hotels
Indoor Stadiums
Shopping Centres
Construction Sites

LARGE Systems

Applications:
Airports
Outdoor Stadiums
Banks
Department Stores
Large resorts

KEY

Management Server
One single network point to manage all devices
Recording Server
Storage and streaming of video from cameras
Other devices Server
3rd party devices integration



XENARIO Client RECORDING APPLIANCE

SR-V-4420 SR-V-4550 SR-V-4550-P



Product Image			
Model Name	SR-V-4420	SR-V-4550	Power Redundant SR-V-4550-P
Max IP License	32	64	
License Type	Full		
Server O/S	Linux based		
Video Compression	H.264, MPEG4, MJPEG		
Recording Performance	Up to 250Mbps	Up to 550Mbps	
Removable HDD Trays	4x SATA II	8x SATA II	
Max Storage Per Drive	6TB		
Max Internal Storage	24TB	48TB	
RAID	0, 1, 5, 10		
External Storage	DAS, iSCSI, NAS		
External Ports	4 x USB 2.0, (for mouse, UPS) 1 x eSATA (for DAS)	2 x USB3.0, 2 x USB2.0, 1 x eSATA (for DAS)	
Ethernet (NIC)	2 x Gigabits Ports		
Voltage	100 - 240V		
Power Consumption	Full loading:50W Max:250W	Full loading:150W Max:500W	Full loading:160W Max:500W (Redundant Power)
Dimensions (H x W x D)	45 x 447 x 429 mm (1 RU)	88 x 447 x 583 mm (2 RU)	88 x 447 x 583 mm (2 RU)
Weight (Without HDD)	6.0 kg (13.2 lbs)	11.4 kg (25.1 lbs)	13.2 kg (29.1lbs)
Temperature (Operating with HDD)	0°C ~ 40°C (32°F ~ 104°F)		
Humidity (Operating)	5% ~ 95%		
Supported Language	English, Italian		





Holidays & Leisure

Spark currently provides excellent surveillance services in multiple fields such as hospitality, entertainment and shopping. Luxury hotels or resorts, amusement parks or a multi-branded shopping malls: all of them share common surveillance needs: theft protection and random people flow in settings of large areas. Spark's offers the right security solutions, providing quality footage 24 hours a day, 7 days a week.



Metro & Trains

Some of the most difficult areas to secure are undoubtedly train & metro stations. Many stations don't have entrance control like the ones used in airports. People enter, transit and exit through stations without any knowledge of luggage contents. Spark is able to offer solutions by providing both discreet cameras, in order to monitor small areas, and Ultra HD cameras to monitor large areas.



Logistics & Industry

The procurement, manufacture and distribution of goods are necessary operations for businesses all over the world. Security issues related to these operations often have serious economic consequences. An effective surveillance system guarantees return on investment, by preventing the risk of theft, damage and delay of goods. Spark's technology allows every detail to be observed, even at long distances.



Traffic & Cities

Traffic surveillance of both inner city and suburban roads, as well as city surveillance and large car parks, is currently achieved by the installation of large numbers of cameras throughout the territory. Spark offers a cutting-edge solution that makes it possible to receive concentrated information on extensive areas, whilst at the same time allowing the possibility to obtain extremely detailed images.



Stadiums

As stadiums offer congregations for thousands of people a week, month and year, they must fulfil particularly stringent criteria in terms of comfort, safety and security. All infrastructures that host important events have specific security requirements linked to the presence of large numbers of people. In order to provide the required solutions, it is essential to combine expertise and knowledge with the stadium operators. All the (critic) areas, can be monitored from a central location, and everything that occurs during the event can be recorded and stored for later analysis.



Airports

Within the airport infrastructure, as well as in the extensive external areas, top-quality images are required. Spark's total surveillance system includes Ultra HD technology allowing the monitoring of large Areas, a comprehensive Central Management System and a selected number of Full HD cameras for both indoor and outdoor usage. Spark is the ideal partner for airport security.



Banks

Discreet, reliable, constant theft protection and people safety is of the utmost importance in the banking industry. Threats may also occur from inside sources at various levels. Spark's range of solutions can cover both the need for discreet indoor cameras, as well as the monitoring of outdoor area's. Finally Spark Management System's flexibility allows a distributed security network to be designed, to centralise overall control at one or more security offices.



Casinos

The specific needs of casinos require the use of tailor-made products, often developed to meet requirements very different from those of standard professional surveillance systems. A video surveillance system suitable for casino-use, must have special performances and functional features, as well as being extremely reliable. Part of performance though: Spark cameras allows operators to clearly distinguish card suits or the value of chips on the table. Ultra HD technology helps to reduce the number of cameras around the gambling area while retaining the required resolution and frame rate.



After Sales

CUSTOMER
FEEDBACK

TECHNICAL
SUPPORT


AFTER SALE
SERVICE

PRODUCT
UPGRADE

CONTINUOUS
RELATIONSHIP

Your wish is our command.
Here at Spark, we believe that
the after sales service we provide,
is a crucial aspect in order to create
customer satisfaction and customer retention.
Customer feedback helps us to incorporate necessary
changes in order to safeguard product quality.



spark

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