

# andarrete



## High Technology Video Surveillance Systems

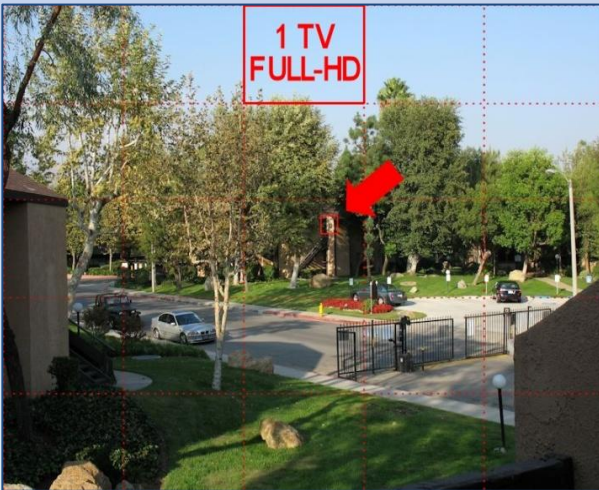


# About company



Our company was founded in 1977 and initially developed IT systems, computer networks over optic fibres and radio links. In 2002 Ondarete™ entered the market of video surveillance, its exclusive patented systems allow cameras to operate in any light conditions, customize the control platform's software on demand, develop automated video detection systems.

## Video surveillance, our profession



A picture from 50 megapixel camera.



Details presence in a little portion.

- **Very high resolution:** digital systems integrate sensors from 5 to 200 times better than analogic ones, from 1 up to 50 megapixels, improving significantly the angle of view of the area covered, and the identification of objects at a great distance. The equivalent of an image to 50 megapixels are 25 TV Full-HD connected together!

# Digital is much better then analogic

Analogic systems are still available on the market and considered competitive due to their low cost, or sometimes due to the inability of installers to manage and configure a complex digital system. What seemed a good deal becomes a bad one, as the pictures show:



1) **Details:** digital cameras are able to capture the most significant details and allow to recognize faces, signs and car's plate numbers.

2) **Wide focus range:** digital camera's sensors allow to capture close as well as distant objects details.

3) **Wide viewing angle:** digital cameras lenses and sensors allow to view a wider area, up to 180 ° horizontally.



analogic videocamera at 15 meters,  
resolution (maximum) 0,3 megapixel.



Digital videocamera at 15 meters,  
resolution 2 megapixel.





Analog videocamera, indoor use  
theoretical resolution 0,3 megapixel.



Digital videocamera, indoor use  
resolution 2megapixel.



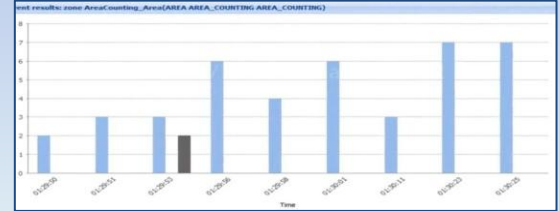


# Other advantages of digital systems

- **Sensitivity and Focus capabilities:** the digital technology has dramatically improved the ability to maintain the focus simultaneously on objects located close and far from camera, moreover the sensitivity of the sensors to dark environments has been significantly improved, ensuring excellent images in all light conditions.
- **High zoom performances and more frames per second:** specific areas of the screen may be enlarged as desired keeping the high quality while the system continuing to record the entire area. Whilst monitoring live a high-frame recorded video the user can reduce speed and appreciate the slow-motion replays.
- **Less cameras needed:** due its own limits analogic systems require a camera installation every 15 meters, digital allow the users to save money installing only one for the whole area of interest.
- **Multiple video streams:** digital cameras provide video in different resolutions simultaneously, allowing to monitor real time video on smartphones or tablets, while they still record at maximum detail.
- **Schedules on movement and electronic surveillance:** we may select particular portions of the video area and raise alarms (SMS, email, calls, etc.) or activate automated records when specific events occur. That's useful for alerting promptly the security personnel.
- **Easy wiring and system expansion:** digital systems can be upgraded with higher performance cameras anytime without replacing wires, moreover they need only one cable for transmitting and powering cameras. Times and costs of installation are minimal.
- **Listen & speak:** our cameras provide a built-in microphone to listen environment and allow to speak and warn through a built-in speaker.
- **Include near sensors & activate automations:** cameras are equipped with inputs and outputs to interconnect with local systems, allowing to open a remote door for example, gates, detect fire, intrusions, etc..
- **Prompt malfunctions reports:** any system malfunction is detected and immediately reported to the control center Ondarete™, allowing our technicians to solve problem on-line within a short time. Digital connection allow us to update systems and keep them updated.



# Customer's habits and choices analysis



Tracking all door's accesses, producing warnings and useful statistics for Your business.



Tracking how many people stop to look at your showcase, and how many of them enter after in the store.



Identify the most popular areas to understand preferences of Your customers.

## Video analysis for people's safety care

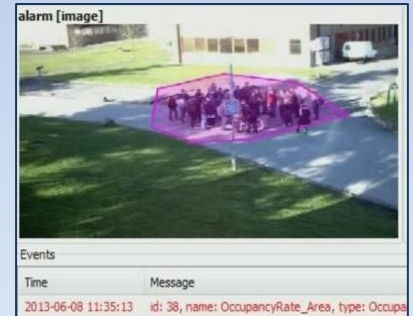


early detection  
accidental falls or people  
lying on the ground.

Automated electronic  
surveillance with generation  
of prompt warnings for the  
security personnel



Recognize dangerous crowding  
or rush of mass in panic  
situations.



# Systems for traffic control

Ondarete™ has developed for the Italian State Police Corps and some municipalities control systems of vehicles traffic in strategic areas. The advantage of the dual technology, advanced plate reading system and high-resolution video, consisting in reporting the exact time, direction and speed of each vehicle, recognizing the drivers and passengers face profiles, mounting historical video data for a single plate number, monitoring jams, wrong way transits, hazard parkings and other dangerous events.



Control sites for the City of Santa Maria Maggiore (VB) and the Municipality of Verbania.





## The traffic control system is able to:

- Acquire the license plate number of the vehicle up to 160Km/he and 400 meters away.
- Operate in complete absence of environment light..
- Guarantee the recognition of 100% of transits, including heavily soiled plates, decentralized, and with signs around it.
- Record the date and exact time of passage.
- Report the speed of vehicle.
- Continue to operate in case of interruption of data link.
- Synchronize with the local country's database to promptly alert on transit of suspicious vehicles, uninsured ones or in administrative detention.
- Allowing automatic gate access to vehicles in 'white list'.
- Consult quickly the history of all the transits of a particular vehicle.
- On request create an high quality video-collage of vehicle from all cameras that reported its transit.
- The software is available in different languages.

CarPlateServer --- [VIEWER MODE]

Find carplate | Statistics

CarPlate to find  
 \* : n any character or no characted  
 ? : 1 any character or no character

Find CarPlate

Search position  
 IP/hostname:port  
 192.168.100.100:8081

Find in time span | Live

From: 04-09-2013 0:00  
 To: 04-09-2013 23:59

Search Options  
☐ Search WHITE LIST  
☐ Search BLACK LIST  
☒ Search NO LIST  
☐ Search UNREAD

Gates filter | Load gates list

☐ Look in signaled carplates founded in remote DB  
☒ Smart search (consider similar characters like O and 0, B a

Found CarPlate (119)	Date Time	CarPlate Type	Gate
<input type="checkbox"/> DT566BJ	04/09/2013 10:35:18	NO LIST	TARGHA604
<input type="checkbox"/> BW890KM	04/09/2013 10:34:55	NO LIST	TARGHA604
<input type="checkbox"/> BH281NL	04/09/2013 10:34:38	NO LIST	TARGHA604
<input type="checkbox"/> CM889AG	04/09/2013 10:33:59	NO LIST	TARGHA604
<input type="checkbox"/> DE276CK	04/09/2013 10:32:50	NO LIST	TARGHA604
<input type="checkbox"/> AJ802EM	04/09/2013 10:32:30	NO LIST	TARGHA604
<input type="checkbox"/> DS241DT	04/09/2013 10:29:13	NO LIST	TARGHA604
<input type="checkbox"/> EM440	04/09/2013 10:29:08	NO LIST	TARGHA604
<input type="checkbox"/> EM440KR	04/09/2013 10:29:07	NO LIST	TARGHA604
<input type="checkbox"/> ED019BJ	04/09/2013 10:29:05	NO LIST	TARGHA604
<input type="checkbox"/> CW147NZ	04/09/2013 10:27:54	NO LIST	TARGHA604
<input type="checkbox"/> EL945MD	04/09/2013 10:27:16	NO LIST	TARGHA604
<input type="checkbox"/> DG153AK	04/09/2013 10:26:31	NO LIST	TARGHA604
<input type="checkbox"/> EL003HK	04/09/2013 10:26:16	NO LIST	TARGHA604
<input type="checkbox"/> CX640WM	04/09/2013 10:26:13	NO LIST	TARGHA604
<input type="checkbox"/> DS224DR	04/09/2013 10:26:01	NO LIST	TARGHA604
<input type="checkbox"/> CB802RX	04/09/2013 10:25:24	NO LIST	TARGHA604
<input type="checkbox"/> EK714KE	04/09/2013 10:25:16	NO LIST	TARGHA604
<input type="checkbox"/> BC965WB	04/09/2013 10:25:07	NO LIST	TARGHA604
<input type="checkbox"/> DB240PS	04/09/2013 10:24:49	NO LIST	TARGHA604
<input type="checkbox"/> ER128BL	04/09/2013 10:23:06	NO LIST	TARGHA604
<input type="checkbox"/> 1AS219EK	04/09/2013 10:22:20	NO LIST	TARGHA604
<input type="checkbox"/> BS258LE	04/09/2013 10:22:06	NO LIST	TARGHA604

ER128BL

Firma digitale assente

Connection type: NO SSL - Time elapsed: 62ms

Language  
 English (United States)

Close

SELEA

# Video analysis for traffic control



Count the number of vehicles transiting, check abnormal driving behaviors, reveal traffic jams appearing.



Alerting on vehicles proceeding in opposite sense on one way roads.

Automated electronic surveillance with generation of prompt warnings for the security personnel



Monitoring the parking of vehicles in restricted areas.



# Anti terrorism systems

Ondarete™ designed and developed counter-terrorism systems for the police forces of different countries with the purpose of observing the persons inside the vehicles in motion, by day and night, preventing the passengers to realize being monitored by using invisible lights.



High-resolution cameras equipped with Ondarete™ special lens let detect faces from far distances.



Even with the headlights of the vehicle on.



In the absence of visible light.

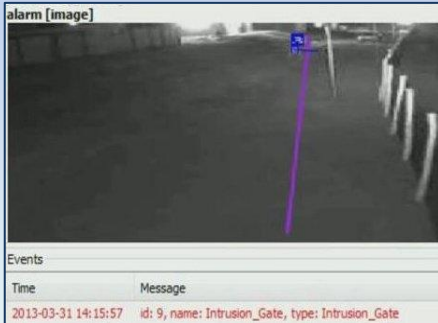
# Video analysis against terrorism attempts



Time	ID	Name	Confidence	Alert Type	Source
2013/09/30 16:10:37	4	Giovanni Insolia	3.95	FaceRecognitionGoogle	192.168.21.70:554
2013/09/30 16:10:33	3	Marco Risso	4.26	FaceRecognitionGoogle	192.168.21.70:554
2013/09/30 16:10:30	2	Riccardo Lora	4.88	FaceRecognitionGoogle	192.168.21.70:554
2013/09/30 16:10:21	1	Pier Vittorio Sassone	3.62	FaceRecognitionGoogle	192.168.21.70:554

Face recognition to a degree of up to 99% accuracy, every single unknown profile detected is stored 24h/day and may be identified later by an external photo or identikit inserted in the software; useful to detect all the passages the subject under all the system's cameras, with times and locations.

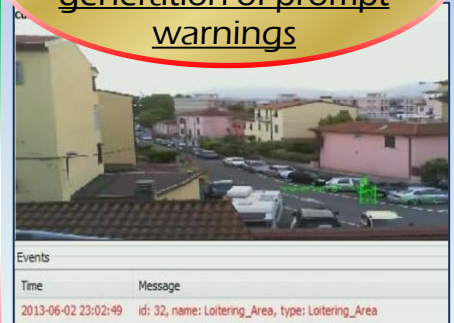
Automated electronic surveillance with generation of prompt warnings



Detect intrusions in restricted or dangerous areas.



Detect objects left unattended on the ground.



Monitor suspects of thefts in parking lots.



Continuous analysis of electronic devices against tampering (in photo: skimmer placed in ATM).

## OTHER SERVICES ON EVIDENCE:

- suspicious aggregations in sensitive areas,
- control for the passage of bulky abnormal items.



Theft alerts based on missing items.



# Prevention for environmental disasters

The IP System Ondarete™ for the prevention of environmental disasters places cameras in strategic areas for surveilling wide spaces from high towers, it's able to detect the presence of smoke anywhere and alert the authorities of the presence of fire. Through external lasers connected to the camera inputs, we can monitor local landslides and flooding occurrences, providing a complete environmental protection. Ondarete™ realized the operational control center for "Italian Civil Protection" in airbases Canadair allowing the personnel to take immediate actions and alerting prompt citizens for evacuation from that area. Power speakers that are managed by a microphone in the same control center are part of the system.



In the picture: the site installed over the fire towers of National Park "dell'Uccellina" (Grosseto), the height location assures a 360° complete control.

alarm [image]



foreground [image]



Events

Time

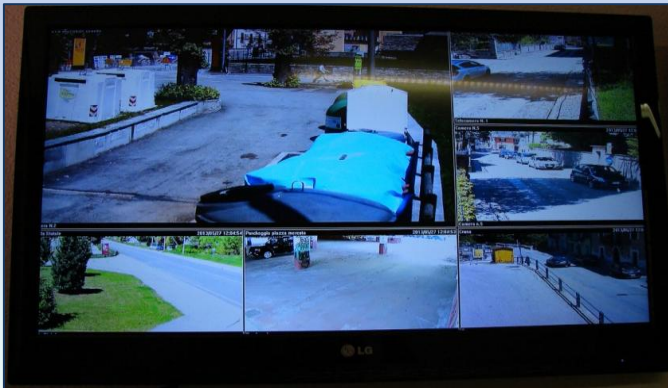
Message

2013-05-17 23:45:22 id: 4, name: SmokeFire\_Area, type: SmokeFire\_Area

# Why choose Ondarete?

The customer's requirements are the most important thing to us, we listen carefully and bring our experience to your service. What makes us different:

- Our technicians configure your site with extreme competence and expertise, ensuring success even in the most difficult conditions. Ondarete Technology™ applies to cameras special patent filters and lenses that allows to see where our competitors simply can't. Challenging achievements are our main source of expertise.
- Our systems provide automatic surveillance and generate prompt alerts to the security personnel. With our innovative technology it is no longer necessary to employ personnel 24 hours a day to watch a screen.
- If your priority is to respect the sense of privacy of your customers we can provide small cameras and place them carefully at correct places.
- The whole system can be displayed by one or more screens, with function "mosaic" customizable. Zoom a single camera is easy as a click.
- Each system is accessible via internet, by laptops, tablets and smartphones. Camera are configured specifically for this extra-feature, to send video streams on demand also at lower resolution preserving to record in full detail.
- Each recording is consultable anytime, while the system keeps recording the actual time. The recorder can store videos up to several days before, according to your needs. System access and videos are protected by a password.
- Ondarete™ provides additional software to extract and improve specific images from videos to clear them as unmistakable evidence.
- Ondarete™ ensures on-line and on-site the operation and maintenance of your sites free of charge for the first year of use, we extend the warranty and service lifetime. Our systems are assisted 24h signaling any malfunction occurs directly to Ondarete™, we care to keep them updated and optimized allowing you the maximum performance.



"mosaic" feature



multi screen control-room



# Design and implementation of the sites

In the study of each outdoor project we realize an Autocad 3D model to calculate the correct position of cameras, radio links and cable routes.

Examples of connections used:

## Copper cables.

Advantages: easy installations and reduced costs. This solution allows to power the camera with the same cable, therefore is the most used. Maximum length: 100 meters, the available bandwidth: 1 Gbit (in theory).



## Approved 5-17-24 GHz radio links.

Advantages: When it is not possible or it's too expensive to place a cable the radio link is indicated. Maximum length: up to 50km, available bandwidth: up to 500Mbit.



## Optical fibre.

Advantages: it allows to reach great distances and prevent any electrical problems from severe thunderstorms. It's the highest reliable connection and the proper solution when sites located far away. Maximum length: illimited , available bandwidth > 40Gbit for pair (up to 400 pairs for cable).



## Our main partners:



# ondarete

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