



Made in Italy

## VIDEO and SIGNAL Management System

iDefender® is a powerful software environment, fully developed in Italy, open, highly scalable and easy to integrate, perfect for managing different size systems.

# iDEFENDER®

Its federated architecture is capable of satisfying all modern needs in matter of surveillance, from easier (live view and recording) to more complex ones (multi-monitor management, federations management, operators management, etc.).

**iDefender** has been conceived like a modular suite, a system that grows in time by adding cameras and devices, thanks to special re-use politics clients' investments will be maximized without wasting anything that is already present and working; as customers' demands grow, the system grows accordingly by integrating new devices on field and allowing the management of all systems under a unique platform.

**iDefender** is flexible, it supports an infinite number of cameras, users and areas.

**iDefender** has maximum reliability, thanks to the Edge Storage support and redundant server management, you have the guarantee of always accessing the system and recordings.

**iDefender** is the ideal solution to manage systems requiring a full knowledge of the situation and a real-time response, by distinguish between informations useful to the user, using interactive multi-layer maps linkable to alarms.



## iDefender Core®

**iDefender Core®** is the heart of the system and it manages video streams and signals from the devices connected, it can also store, link, analyze and notify them. Thanks to video analysis and access control options, iDefender Core controls a wide range of functions, from alarm detection to alarm report to users or automatic systems. It is also able to handle hierarchical and distributed architectures, clustering architectures, multi-server and multi-site architectures. Thanks to its numerous modules, it's always calibrated to satisfy demands, allowing the access via client or web browser.

The application allows you to create different customized layouts. The user can organize systems components, create, edit and delete default layouts easily by dragging & dropping icons (cameras and devices) where he likes, under the supervision of a rule engine.

Live view, playback, exportation and sharing of video and alarms are available. There is a synoptic where you can position camera and device icons.

Certain icons are used to report alarms, while pulldown menus allow you to search and view related information. It's multi-user, to allow every operator to do all or some of the actions available. It's multi-monitor, to support any number or combination of monitors and to have a wide view of images and information on different screens, to reduce time response, especially for bigger systems. The application allows you the access to images and devices status even from tablets or smartphones.

It's multi-platform, it can run under Windows, Linux and Mac OS.

It's multi-language, the user can choose his favorite.



## iDefender Visual Client®

**iDefender Visual Client®** is the graphical interface of all system functions, it's user friendly, both for experts and beginners. It can fit easily to different work environments. It allows the access, from any computer, to one or more iDefender Core Systems, and it's a complete tool for video and alarms management.



## iDefender Keeper Server®

**iDefender Keeper Server®** is an independent system module. It allows you to monitor the status of one or more iDefender Core, to guarantee fast operation in case of fault, as well as to manage smartly alarm notifications, assuring that they're taken in control (systemistic and operative).

Monitoring is done both by polling and by an automatic notifications from all components of the system, and present or past performances of the whole system can be displayed on a simple synoptic. Alarms notification manager module lets you classify alarms by their typology, as well as establishing forwarding rules in case of "not taking in charge" by one or more receivers.



# FEDERATED ARCHITECTURE



iDefender supports a [Federated Architecture](#), i.e. it allows the connection of single iDefender platforms creating a father / son hierarchy of allied sites. Each site of the Federated Architecture is a system made up by an iDefender Server and a certain number of cameras. When single iDefender are added to the architecture, they are shown to administrators and users as a unique system, even if they are controllable separately.

Users can access video, audio and other resources available in all iDefender systems the architecture is made up; there's no limit to the number of sites that can be added to the alliance and neither to how they are connected. iDefender is the perfect solution for plants made up by many buildings, campus or a whole metropolis; this system allows you to operate on a wide scale in a flexible way to get an efficient multi-site video surveillance management.

Thanks to the Federated Architecture, iDefender lets you monitor and manage, centrally, distributed video surveillance systems without interfering with local management and monitoring: this is a key benefit every time a site is offline.

It's possible to imagine that all video systems located in a city can be integrated into one big Federated Architecture, in this way independent video surveillance systems of different entities can build an integrated city from the video surveillance point of view.

## [iDefender offers several advantages.](#)

### [Scalability](#)

iDefender allows different designers and integrators to design, build, implement and create a growing big video surveillance system made up by different sites, each one with dozens of devices and users.

The special architecture lets you have the necessary flexibility to create, add and delete sites according to user's demands.

## [Manageability and User privileges](#)

User privileges structure in the architecture is so flexible that users and administrators can have access to any combination of sites from a unique system.

## [Performance](#)

In the architecture, each site can be designed according to single site performances, making the designer job easier because he doesn't need to take into account a big complex access network between every pc client, server and cameras.

To be part of the architecture, each iDefender System only needs a connection to the network of the architecture, this connection can be established with a firewall or router.

## [Server and network easiness](#)

Network architecture does not require additional servers on every site, doesn't require servers working as gateway to manage traffic nor special features in network devices.

## [Redundancy and fault tolerance](#)

iDefender is already fault tolerant, it has failover support and intrinsically supports standard redundancy methods. Federated Architecture adds further redundancy and tolerance to the already high iDefender tolerance.

This allows video surveillance designers and system integrators to put on each logical / physical site an iDefender. If connection between a site and the Federated Architecture is lost, users will still be able to log in and access cameras of other online sites. The only problem will be to access cameras from the offline site.

# iDEFENDER® SOLUTION

**iDefender** is the suite dedicated to the management and supervision of control rooms, perfect to manage and realize complex and integrated security architectures. It's particularly oriented to control critical infrastructures, it supports command and control processes, operative procedures, and easily adapts to particular needs and clients security policies, by integrating subsystems in a unified homogenous management console and event handling.

## Centralized plants management

The integration of all the systems in a client structure in a unified centralized platform, allows to have everything under control, the administration and correct alarms management;

## Scalability

The architecture allows hardware and software upgrades, helping the user to protect investments and to have a platform always answering to newer demands, by also allowing to plan future investments;

## Smart Video Analysis

Thanks to complex image analysis algorithms, iDefender is capable of detecting strange or potentially dangerous situations and notifying them quickly.

## Hybrid Video Technology

IP and analog cameras can be integrated in iDefender, creating an hybrid system;

## Subsystems integration

It's possible to integrate third party software and different subsystems (access control, CCTV, anti-intrusion, fire protection) under a unified interface, thanks to the use of "open" technologies and protocols;

## Multichannel Technical Help

Technical assistance is always available in multi-channel mode to provide the help you need;

## Reliable intrusion detection

Monitoring and perimeter access violation detection, accident prevention and access restrictions;

## Flexible Architecture

The platform can be used both for simple contexts, where only live watching or recording is necessary, and for complex ones, where there are more recording servers, NAS, clustering systems, videowall, etc.;

## Extreme user friendly

Since it's multi-platform and multi-language, it's possible to manage every video source directly from a PC, smartphone and tablet by using an user friendly interface;

## Systems tele-monitoring

In order to assure that the iDefender platform is always running, it's possible to activate the Tele-monitoring module. Any anomalies will be quickly detected and forwarded for a rapid fixing;

## Multi-technology access control

It's possible to manage the access to certain areas by using different technologies integrated in iDefender through video analysis, conventional access control systems and alarmed door;

## Always updated

Software is always updated from the R&D unit, to make iDefender always new and upgraded.

## iDEFENDER® platform Software Architecture

### iDefender Core®

iD Licensing IP

iD Map

iD Pillar

iD I/O Allarm

iD Plate

iD Video Analysis

iD Plugin

**iD Licensing IP:** it defines how many IP cameras can be activated and managed with iDefender;

**iD Map:** thanks to this module iDefender can create and manage multi-level active graphical maps;

**iD Pillar:** iDefender software module for encoding video streams, elaboration, live watching, continuous / scheduled recording, available on iOS, Android, BlackBerry and Windows phones;

**iD I/O Allarm:** it allows you to manage input and output contacts from devices connected on iDefender;

**iD Plate:** this module is used in iDefender for tracking and management of vehicle plates;

**iD Video Analysis:** it contains video analysis algorithms that can be activated on iDefender platform (iD-Intrusion, iD-Fire, iD-PeopleCounter, iD-Object Control, iD-Road and many others developing soon);

**iD Plugin:** it contains customized analysis Plugins, that can be activated on the iDefender platform or integrated from third party systems;

### iDefender Visual Client®

Video Wall

Mobile

Keeper Server

# TECHNICAL ADVANTAGES

## Bandwidth optimization

by using image streaming profiling functions, iDefender allows you to optimize system performance and bandwidth;

## Linux-based

iDefender Core® is based on professional hardware and Linux operating system, that is more reliable than traditional PC-based systems using other operating systems;

## Tele-monitored Platform

thanks to Keeper Server®, the software module that verifies correct operation of the platform and warns quickly about damages and faults;

## Estrema compatibilità

iDefender® is compatible with NAS and SAN, external to platform hardware;

## Customizable hardware and software

on client direct request;

## Interoperability assured by special API

## ONVIF and PSIA protocol support

it guarantees full compatibility with many camera brands and other video management systems, so it's possible to integrate the solution with systems already in use;

## Distributed intelligence architecture

by using network cameras, in case of fault of every subsystem, the system still works, thanks to redundant configurations, in clustering and cloud;

## Open platform

iDefender® is a complete open platform, that can be integrated with hardware, software and ICT third party systems;

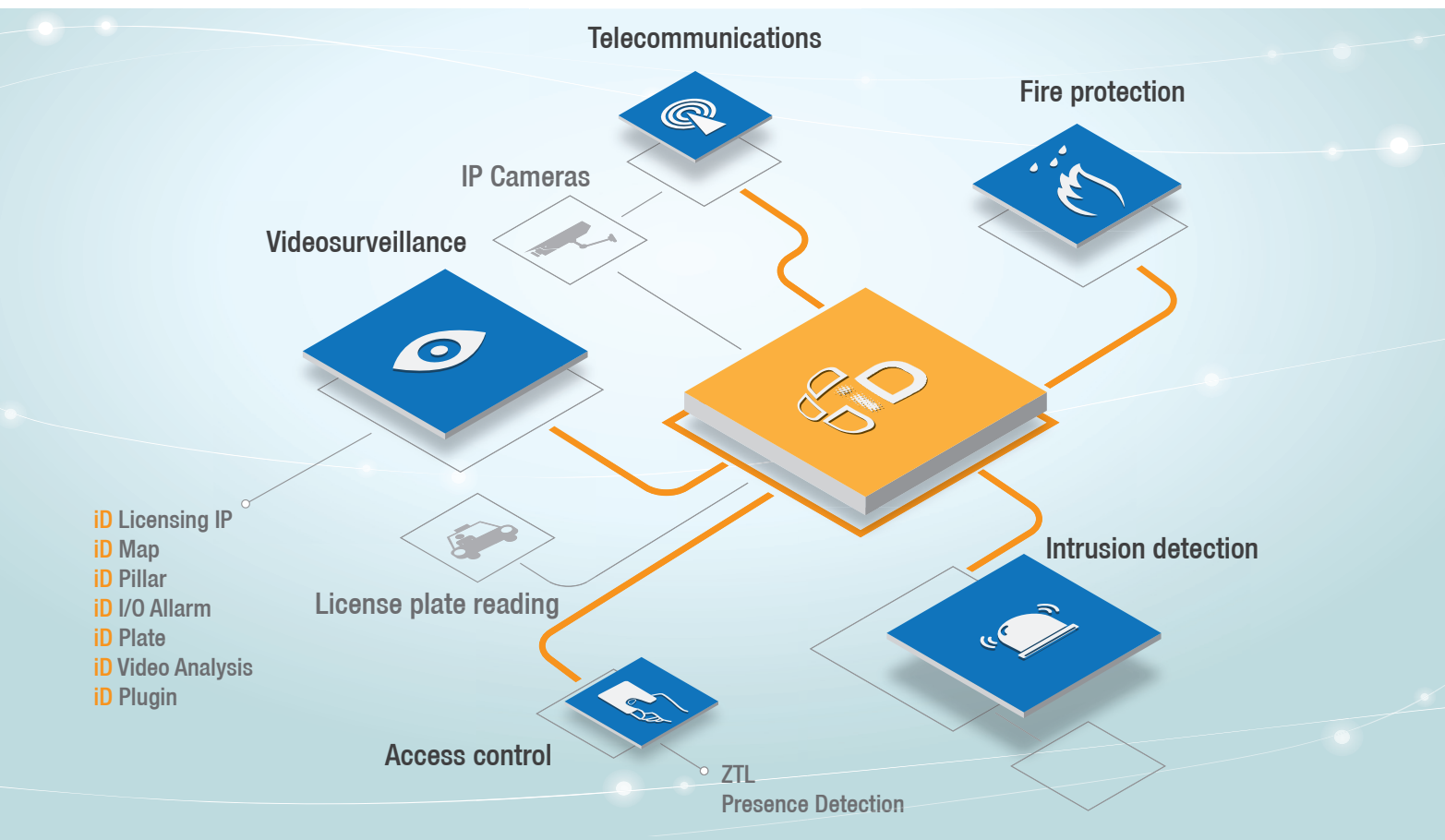
## Gestione protocolli

iDefender® can handle advanced video compression protocols like VP8, H.264, THEORA, MPEG4, 3GP;

## Supporto protocolli

iDefender® supports the more advanced transmission protocols like HTTP, RSTP, RTMP.

## Possibility to integrate video streams coming from other platforms



# STRENGTHS

Customizable and user friendly interface, helps users in using all the features available on the platform. The functional modularity of the platform is achieved by the integration of:

- videorecorders, cameras and video encoders of main brands;
- access control and antintrusion systems;
- fire protection systems;
- and, in general, all technological systems supporting standard communication protocols.

From the point of view of the software, it allows the activation of dozens of applications to duly fit to the various management and budget demands. High reliability in alarm detection, and mostly in alarm management, transforms the video management system from passive to active.

# iDEFENDER® MOBILE

User friendly access to all functions of the system from common smartphones and tablets;



**BlackBerry**



**Integra Solutions S.r.l.**

Via A.Meucci, 33/35  
80020 Casavatore(NA)

P.Iva 07478691210

info@integra-sc.it  
www.integra-sc.it

