

# IB-System IP

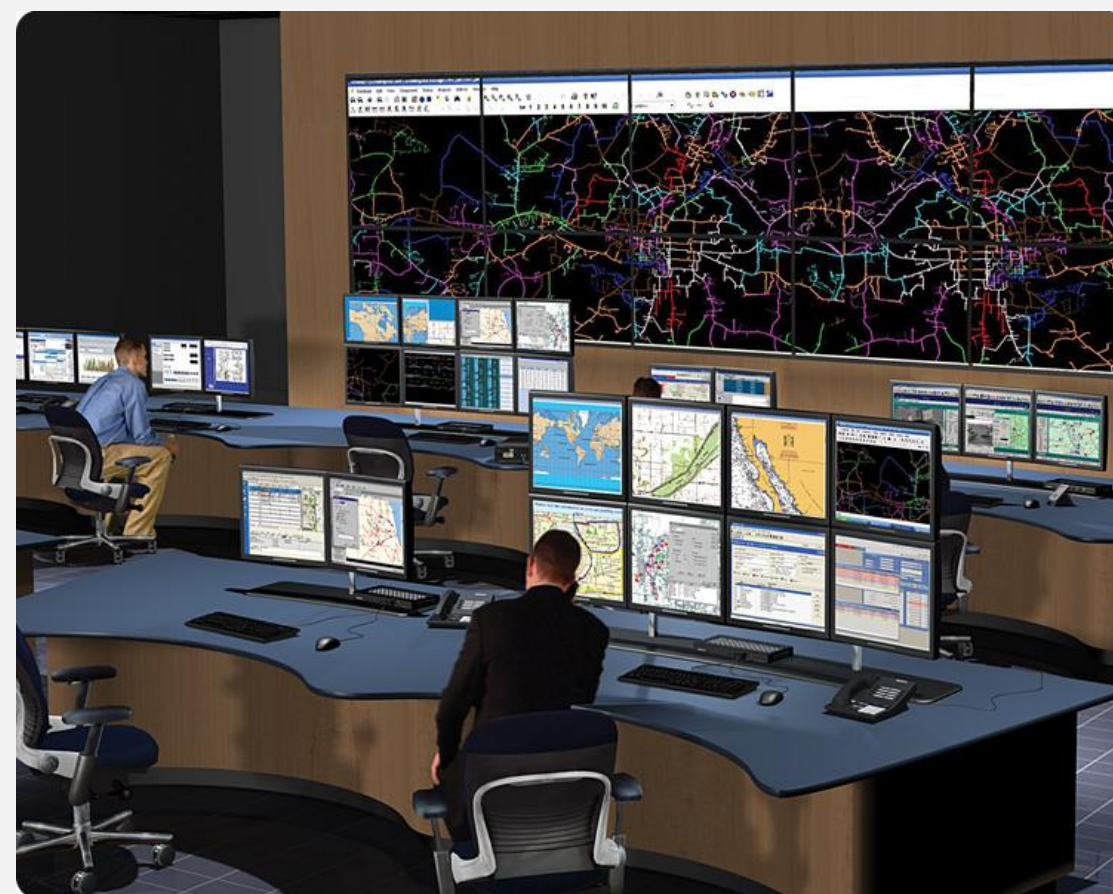
Full IP integration with PSIM-VEMS

12/01/2016

# ***“Remote control, easy management”***

Moving to IP, heading to future!

One of the most important task to carry out for CIAS was provide his products with remote set up and management functions so to help customers easily access all the sensors of the perimeter comfortably from the control room.



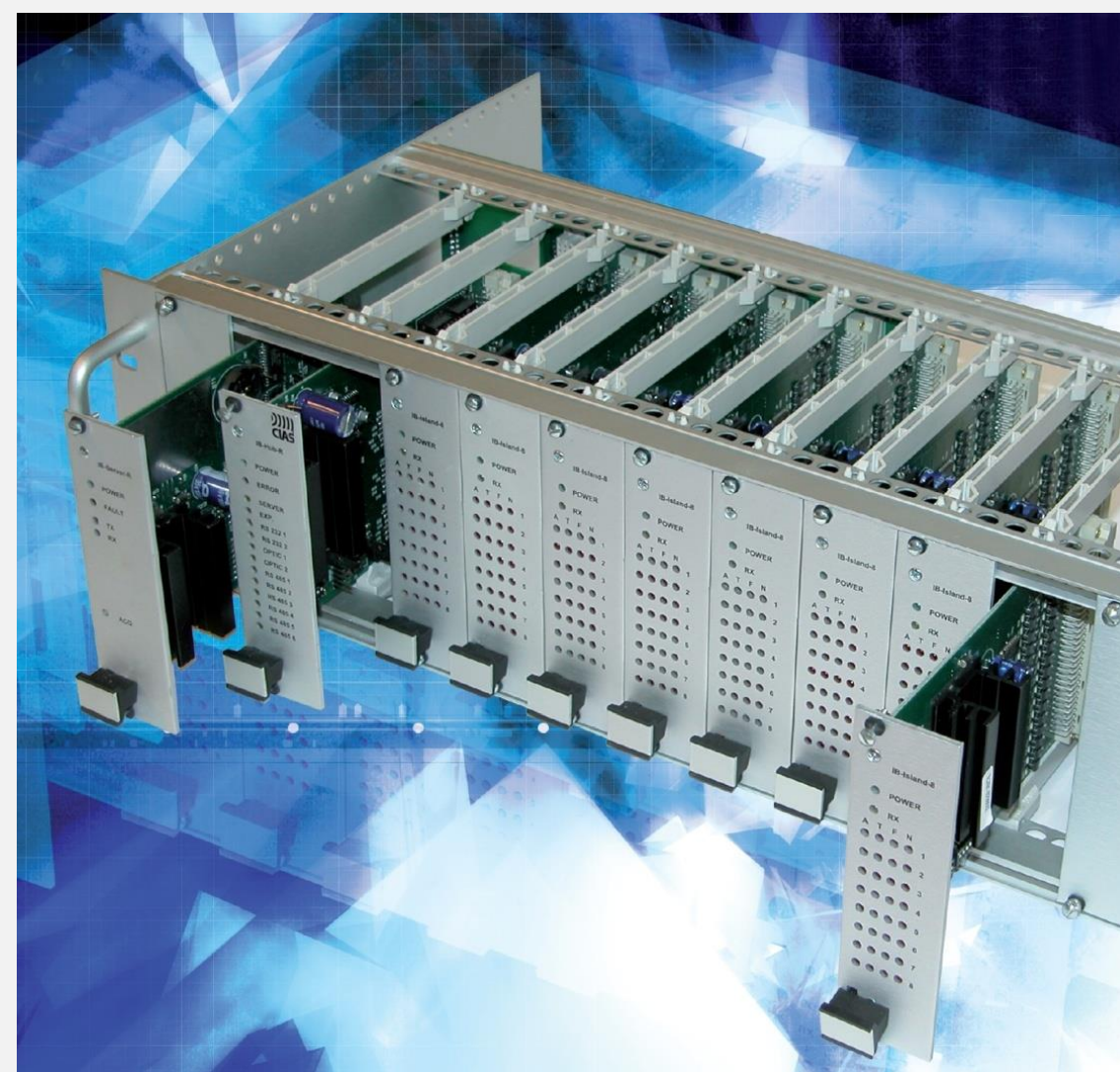


# ***“IB System was the answer”***

Moving to IP, heading to future!

Thanks to a multi-year experience gained in the field of integrated complex systems, such as telecommunication networks, remote controls and alarms management CIAS breaks through the IP world with a wide range of products born to be fully integrated with all the major security equipments producers.

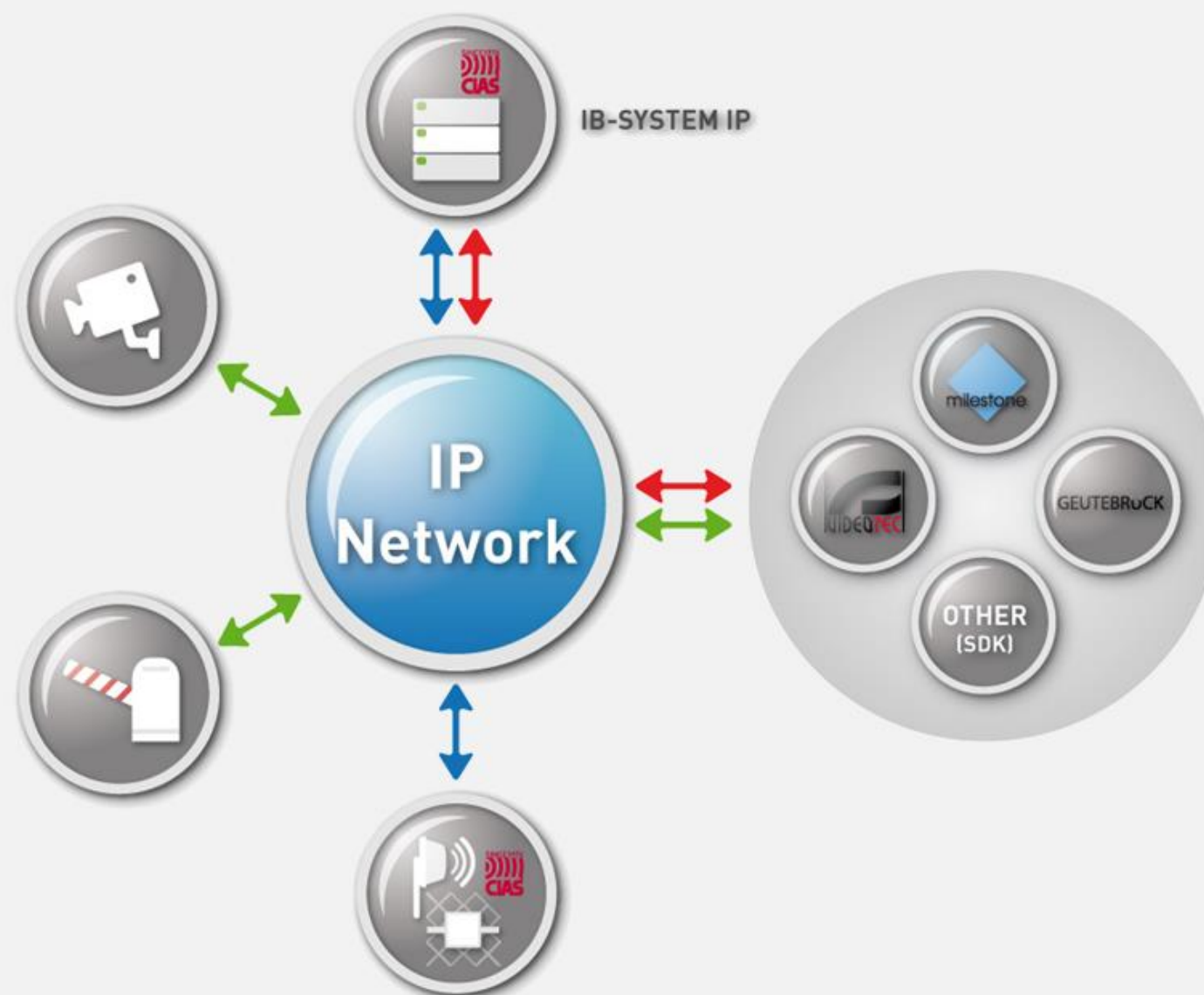
IB-SYSTEM rack plenty fulfilled this duty, having introduced the possibility to establish a connection among up to 128 different sensors in a single serial bus RS485, Fiber Optic or Wireless loop.



# ***“End to end solution”***

Moving to IP, heading to future!

Fully IP integrated and managed by a unique software for an immediate response of up to 1280 different sensors.

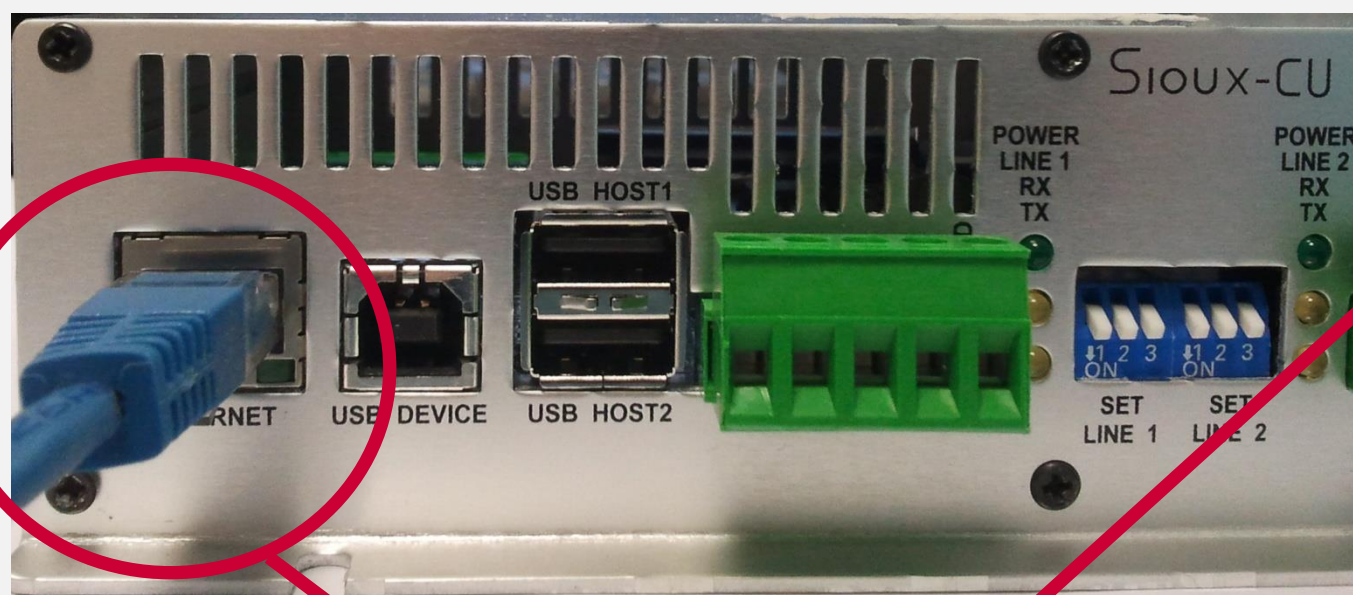




# “Fully IP”

Moving to IP, heading to future!

## Sioux



## IP Camera



## IB System IP



# IB-System IP

CIAS IP SOLUTION





# IB-System IP

Innovative features



## Innovative features

- No infrastructure required (using existing LAN network), TCP/IP protocol
- Up to maximum 1280 different sensors at the same time



# IB-System IP

Innovative features



## Innovative features

- Very low band occupancy: max. 20 Kbits per channel (**total 12,8 Mbit**)
- Maximum response time 500ms for all 1280 devices connected **at the same time**





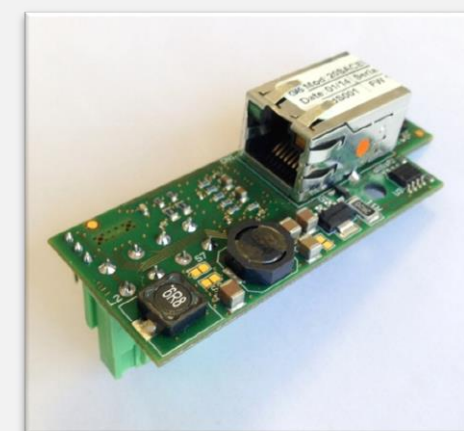
# IB-System IP

Innovative features



## Innovative features

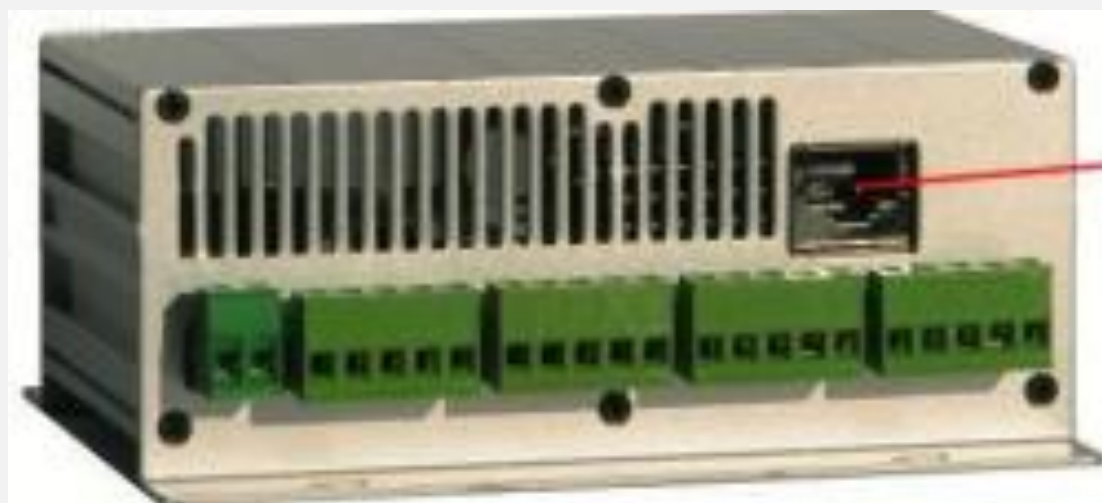
- 640 IP addresses as input channels
- 10 output groups (5 per group, for total 50 IP outputs)  
used to send different / same protocol to PSIM-VEMS softwares
- Licences available in different sizes to match any needs  
(8-16-24-32-64-96-128-224-320-512-704-896 and 1280 devices)



# IB-System IP

IB-FMCREP-ETH

## IB-FMCREP-ETH Ethernet version



IB-FMCREP-ETH is field media repeater / converter with 5 input ports RS 485 serial line to Ethernet (up to 1200 meters with RS 485 certified cable).

It is the ideal solution to use in a Ethernet network infrastructure.

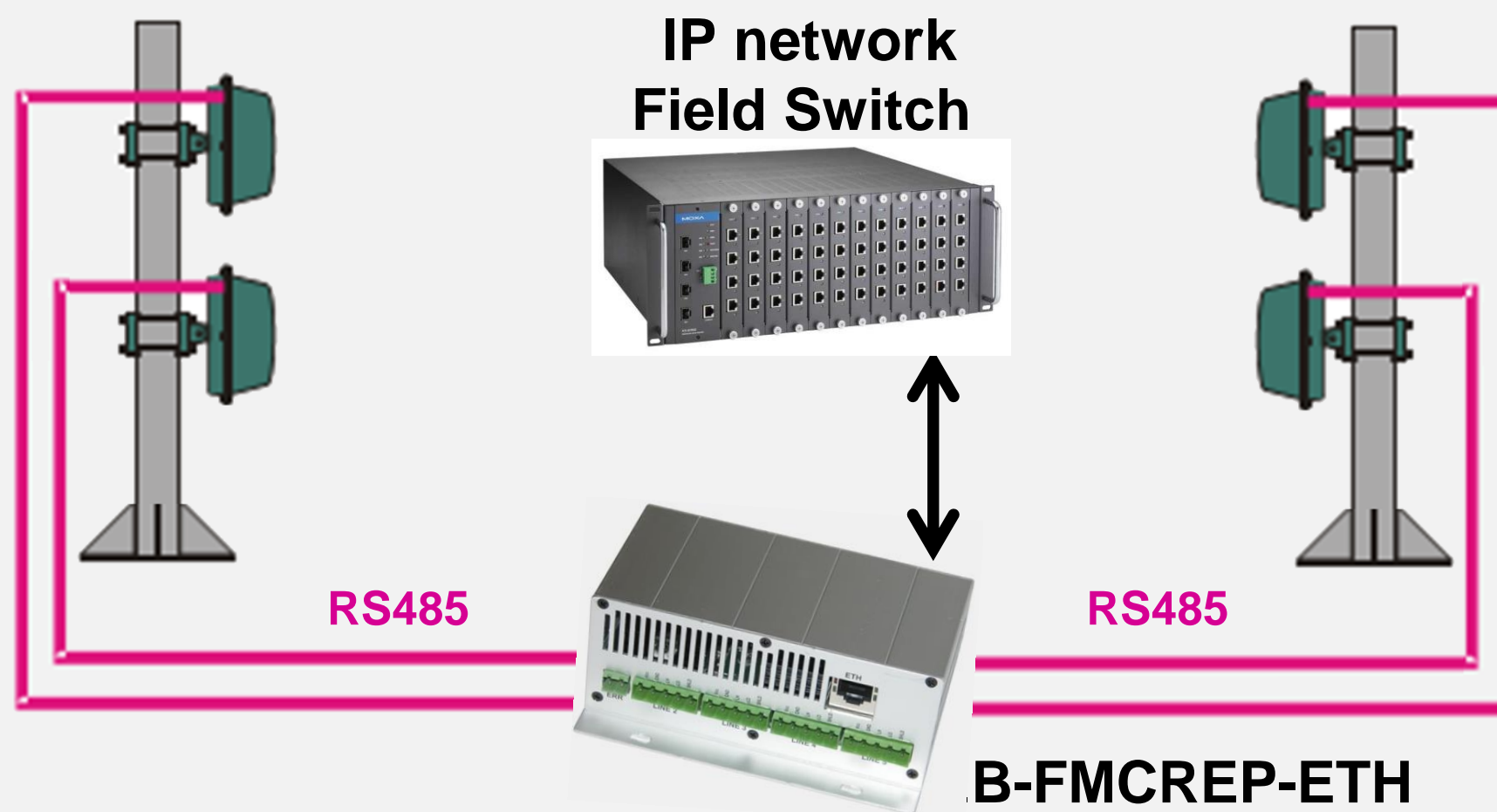
IB-FMCREP-ETH is able to collect all the status of CIAS sensors (alarm, tamper, fault, no answer) and to convert to Ethernet.

**Temperature range -35°C...+65°C**



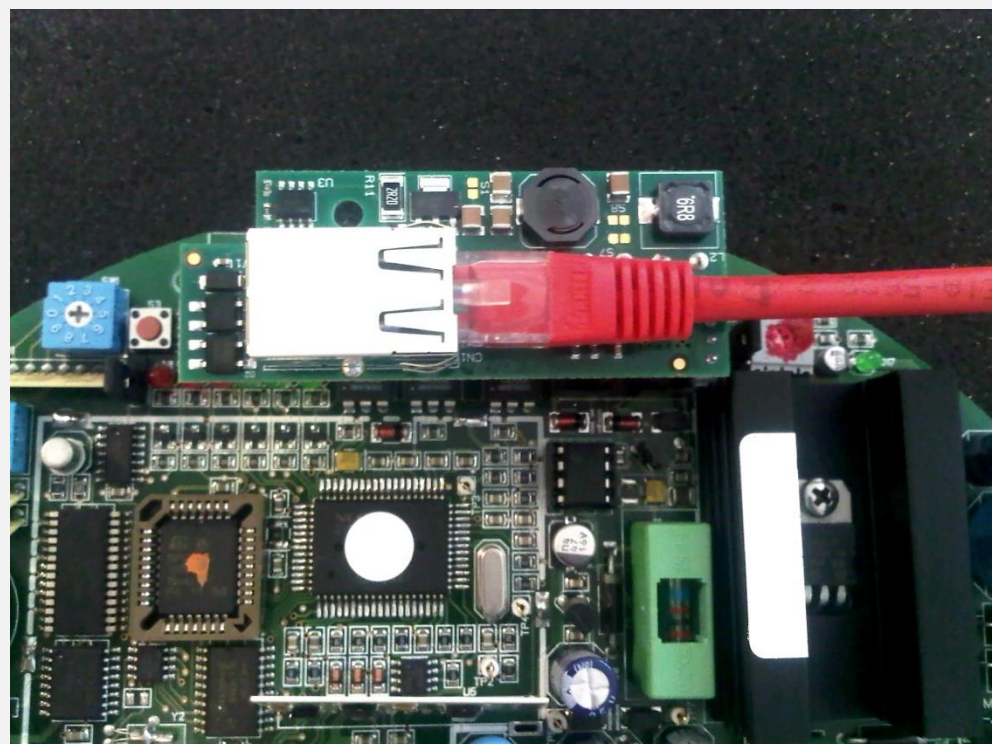
# IB-System IP

Example of field configuration



# IB-System IP

## IP-DOORWAY



- **RS 485 / LAN Interface**
- It can be installed inside the sensors
- Integrated Web server
- **Temperature range -35°C...+65°C**

### Two versions

- With external power supply 13,8 V
- PoE 802.3 af

### Dedicated to digital and fuzzy logic

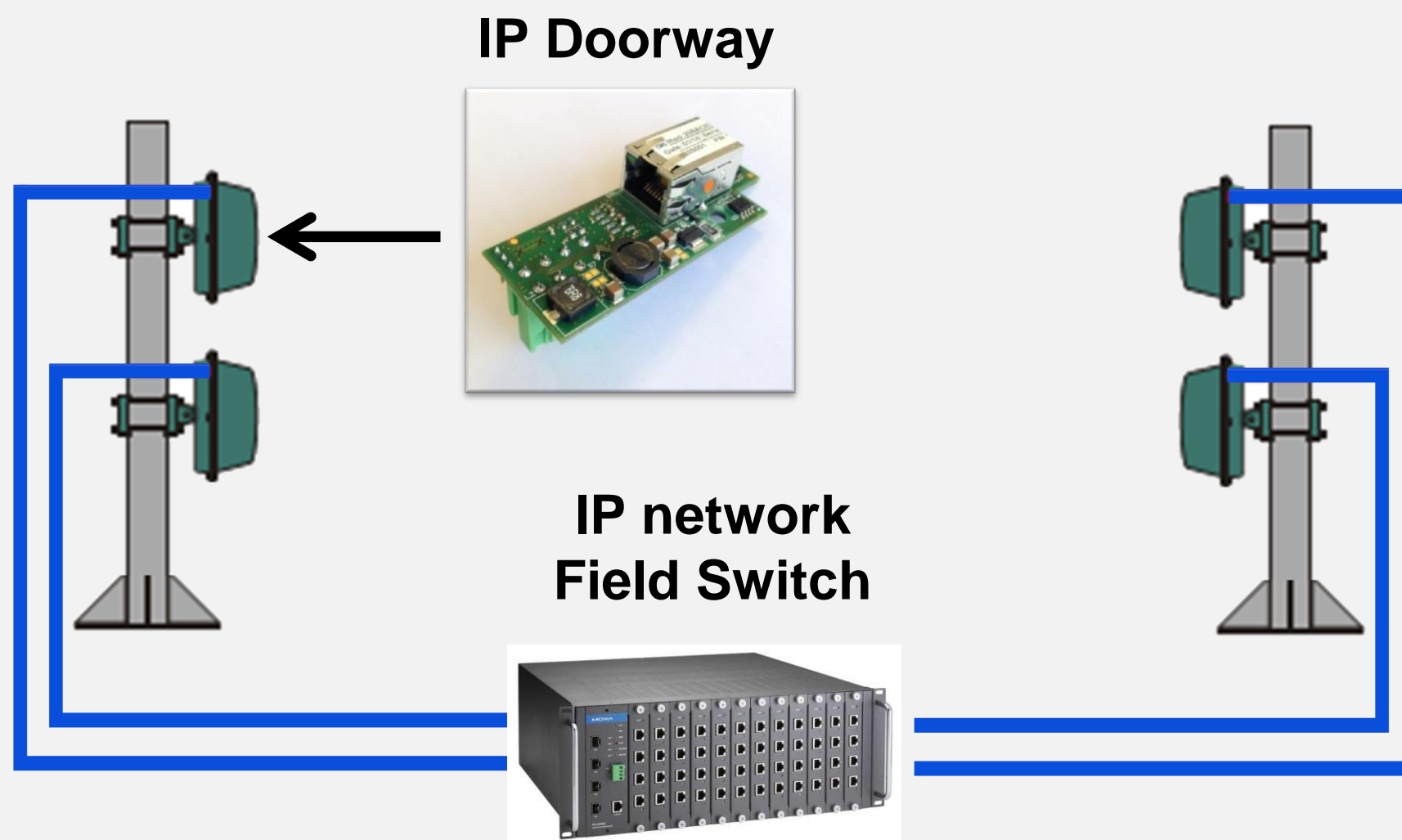


- ✓ Ermo 482X Pro
- ✓ Coral Plus
- ✓ Manta
- ✓ Pythagoras (no PoE 802.3 af)
- ✓ Murena Plus



# IB-System IP

Example of field configuration



# IB-System IP

Innovative features

## Innovative features

- Software protected by hardware keys
- System fully protected by passwords





# IB-System IP

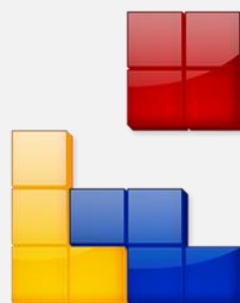
Innovative features



## Innovative features

- Encrypted with signature communication for each device

- System Autoconfiguration



- Full integration with TVCC IP systems



# **CIAS & PSIM-VEMS: integration using protocols**



# IB-System IP

SINCE 1974  
**CIAS**

## IB SYSTEM IP



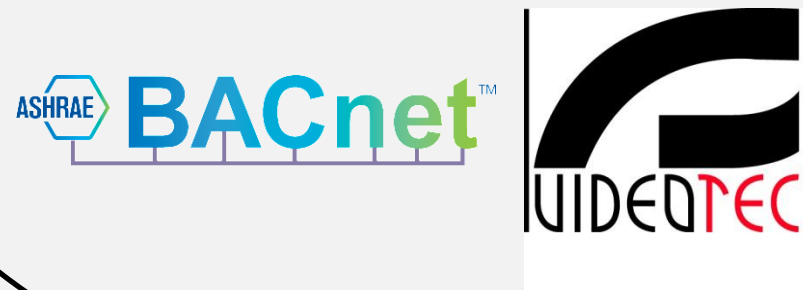
**CIAS SDK**



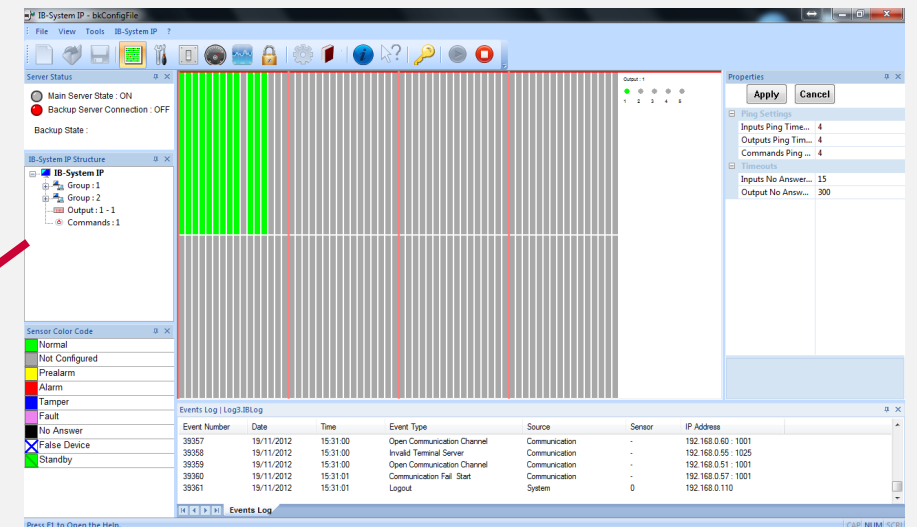
**GEUTEBRÜCK**

The Open Platform Company

**Cortech** Developments  
software **integration** solutions



Integration  
protocols  
output



## PSIM-VEMS Software



# IB-System IP

Innovative features

## Protocols already integrated

- BACnet
- Cortech
- Genetec (Omnicast, Security Center)
- Geutebrück
- Lenel On Guard (ready Q1, 2016)
- Milestone
- Videotec

## On demand any other protocol, i.e.

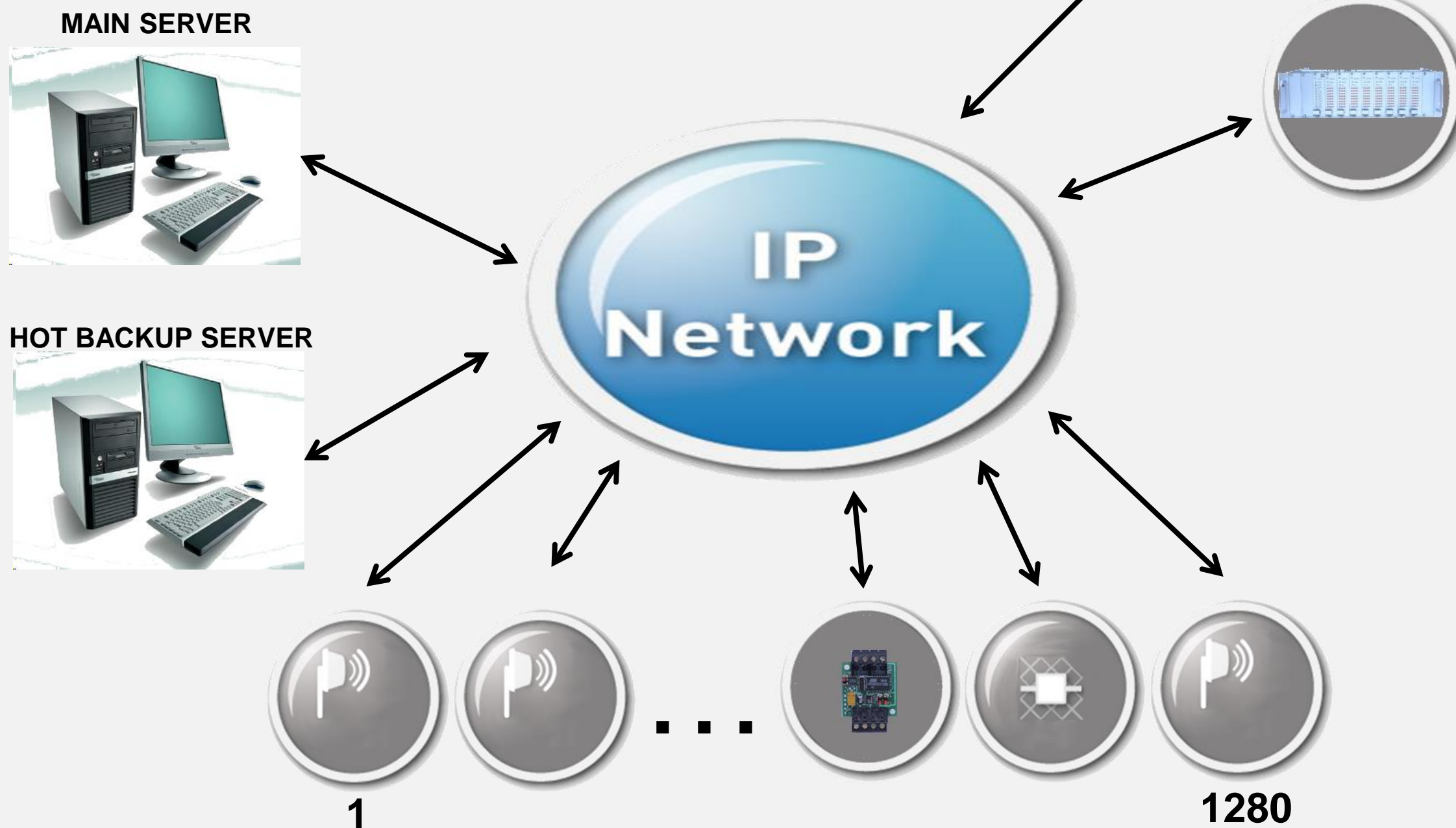
- KNX, LonWorks, OPC modbus
- At customer's choice





# IB-System IP

System composition





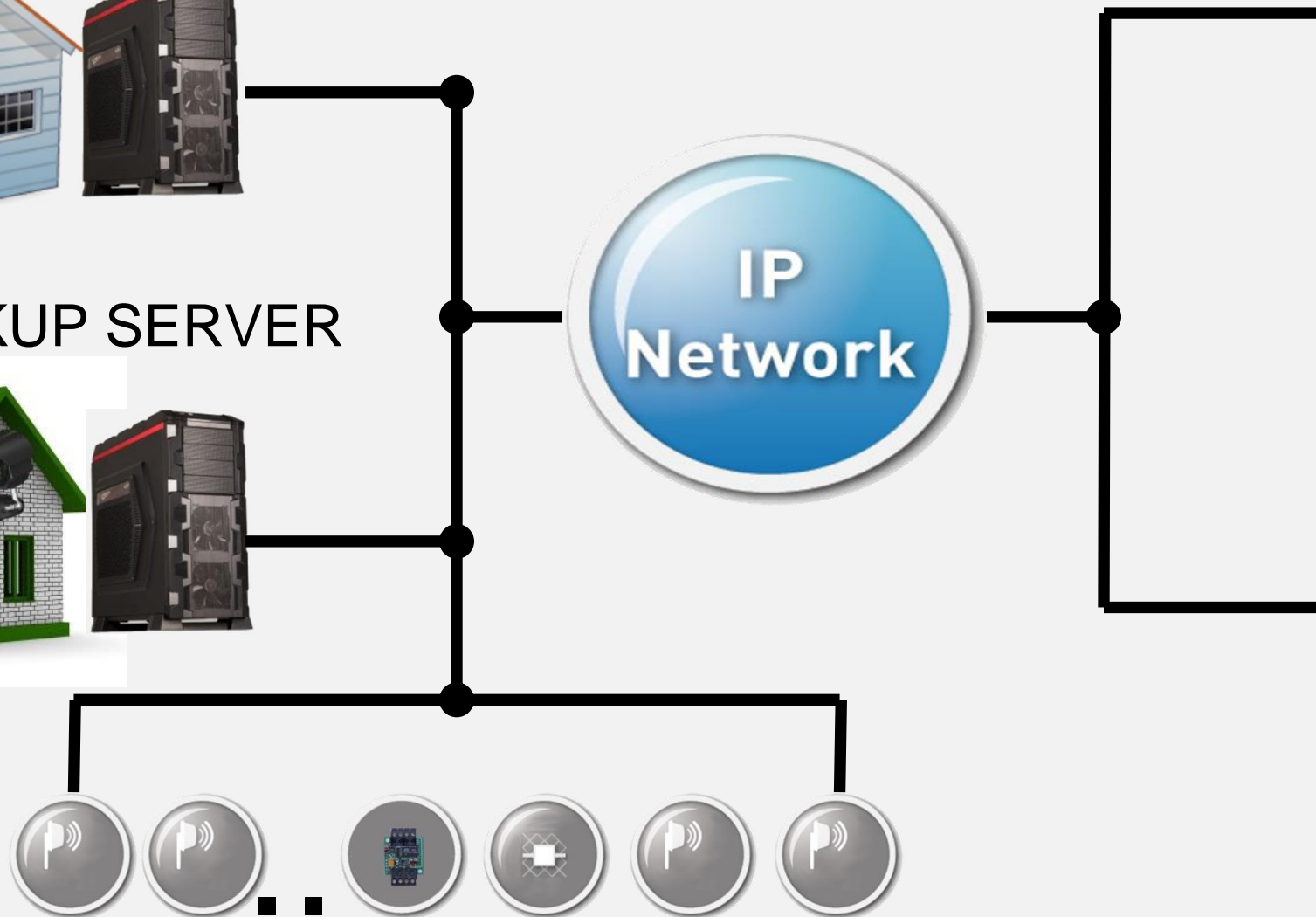
# IB-System IP

## System Composition

### MAIN SERVER



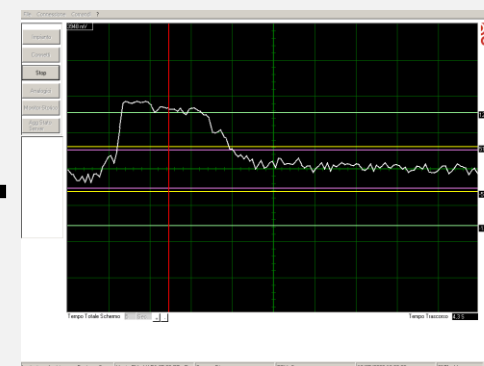
### HOT BACKUP SERVER



### IB TEST IP



### WAVE TEST IP



# IB-System IP

System composition

## IB-System IP: what's made up of?

MAIN SERVER



KEY (LICENCES)



HOT BACKUP SERVER  
(optional)



# IB-System IP

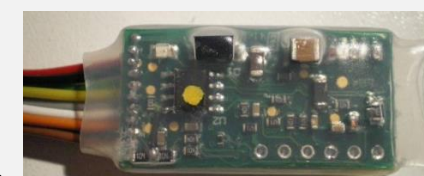
Interactions and connections

## IB-System IP: which devices can interact with?

MAIN SERVER



**New!**



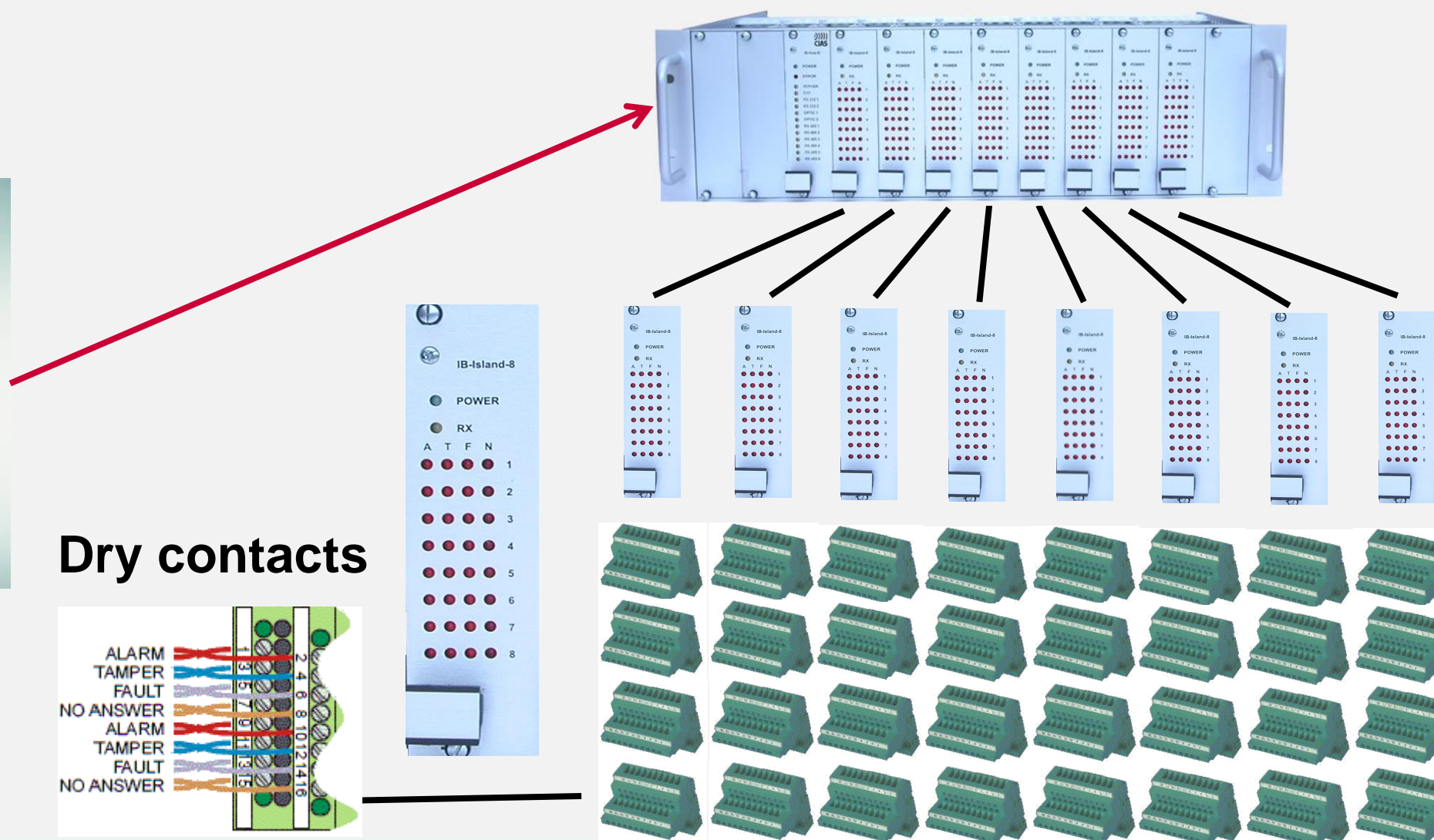


# IB-System IP

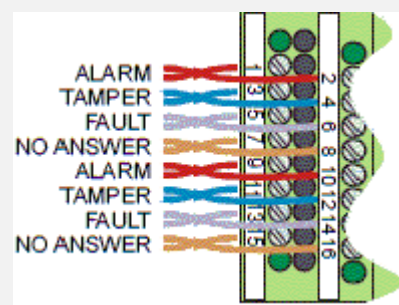
Interactions and connections

## IB-System IP: which devices can interact with?

MAIN SERVER



Dry contacts



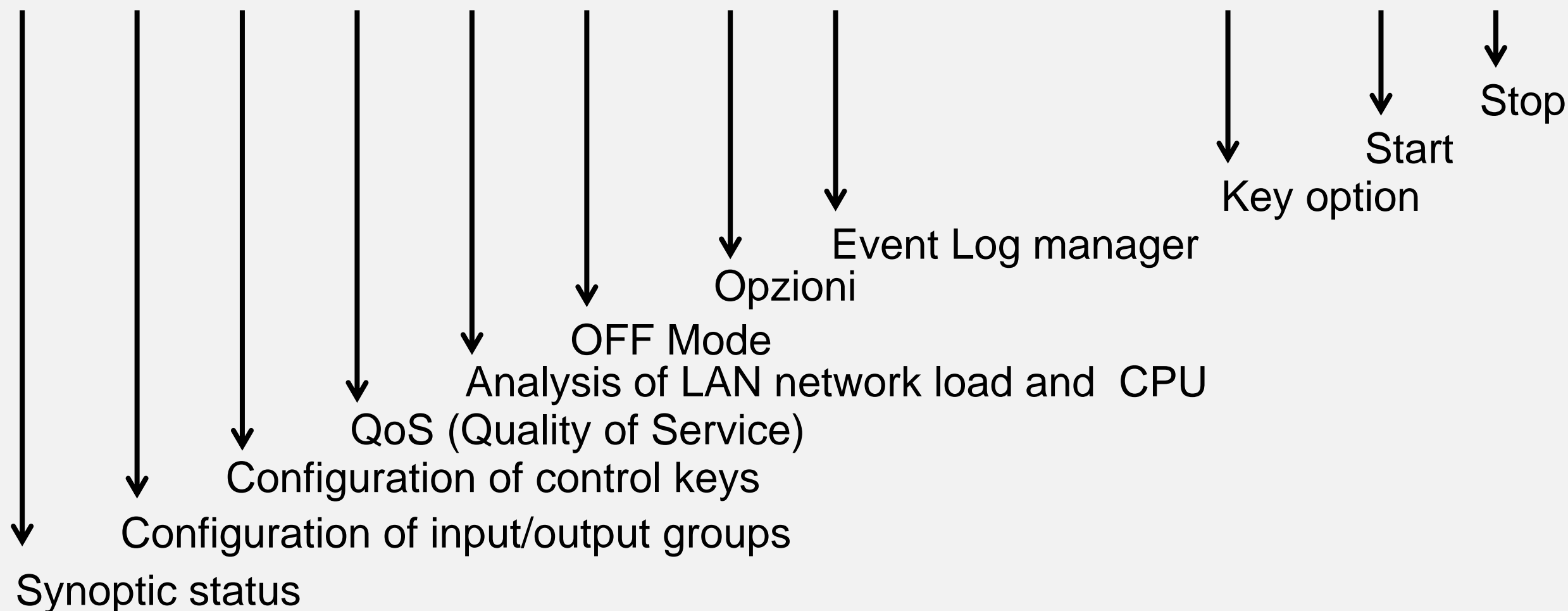
# IB-System IP

IP Integration Server for CIAS sensors



# IB-System IP

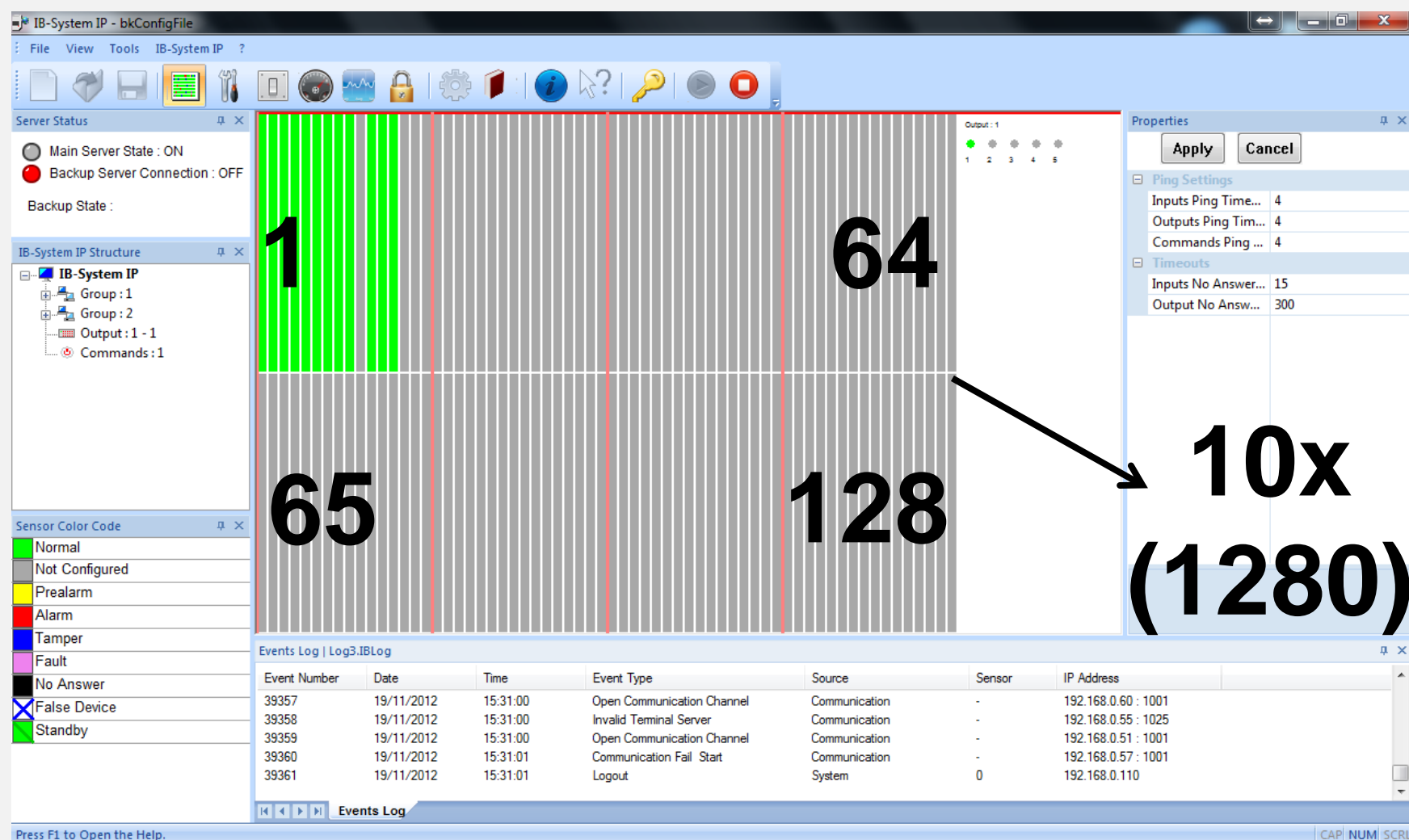
## Upper ToolBar





# IB-System IP

## Synoptic status







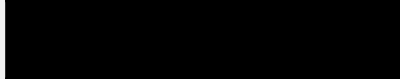

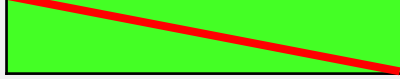


## Functions:

- Status of individual sensors
- Tree structure (inputs – outputs - control keys)
- Characteristic of individual sensor
- SERVER Status
- Legenda

# IB-System IP

## Legenda

	Normal
	Prealarm
	Alarm
	Tamper
	Fault
	Sensor not configured
	No answer
	False device
	Standby

# IB-System IP

## Input Groups Configuration

Groups Configuration

Group Num : 1 Set Output

Communication Settings

IP Address : 192 . 168 . 5 . 150

IP Port : 1001

Group Parameters

Number of Sensors : 22

Selected Devices : 8, 17, 20, 22, 23, 24, 25, 26, 27, 29, 30, 31, 32, 33, 34

Commands

Starting Number Device : 0 Select Sensors Autoconfiguration Search Type ☐ Signature Initialize

Ok Cancel

### Functions:

- Configuration of structure of input groups
- Set-up of IP address
- Autoconfiguration of field
- Manual Selection of individual sensors
- Searching out for devices on field
- Signature set-up



# IB-System IP

## Output Groups Configuration

The screenshot shows the 'Output Configuration' dialog box. At the top, there is a dropdown for 'Output Group Number' set to 1 and a text field for 'Sensors Range' set to '1 - 128'. Below this, there are five sections for 'Output 1' through 'Output 5'. Each section contains fields for 'IP Address', 'IP Port', 'Mode' (Client/Server), 'Protocol' (dropdown), and a checkbox for 'Use Loopback Interface'. Output 1 is checked and has IP 127.0.0.1, Port 1234, Client mode, Milestone protocol, and Loopback checked. Output 2 is checked and has IP 192.168.5.184, Port 1001, Client mode, CIAS 01 protocol, and Loopback unchecked. Output 3 is unchecked and has IP 192.168.0.212, Port 0, Client mode, Milestone protocol, and Loopback unchecked. Output 4 is unchecked and has IP 0.0.0.0, Port 0, Client mode, CIAS 01 protocol, and Loopback unchecked. Output 5 is unchecked and has IP 0.0.0.0, Port 0, Client mode, CIAS 01 protocol, and Loopback unchecked. At the bottom are 'OK' and 'Cancel' buttons.

### Functions:

- Configuration of output groups
- 5 outputs for each group of 128 sensors (also repeated for each group and outputs )
- IP address set-up
- Selection of output protocol
- Set-up of Client/Server
- **Available protocols:**  
c-one bus, CIAS 01, CIAS 02, Geutebruck Milestone, Videotec.

# IB-System IP

## Configuration of Control keys

Commands Configuration

Commands Num : 1

Communication Settings

☒ Ethernet

IP Address : 192 . 168 . 0 . 189

IP Port : 0

☐ Serial

COM Num : 0

Input Parameters

Input Num : 6

Input Type : ☒ On/Off ☐ Balanced

ON Function : Standby ON

OFF Function : Standby OFF

Sensors : 1,2,3, Select Sensors

Ok Cancel

### Functions:

- Kind of connection (serial/eth) for control module
- IP address set-up
- Selection of control input
- Standby key activation (ON/OFF)

# IB-System IP

## QoS (Quality of Service)

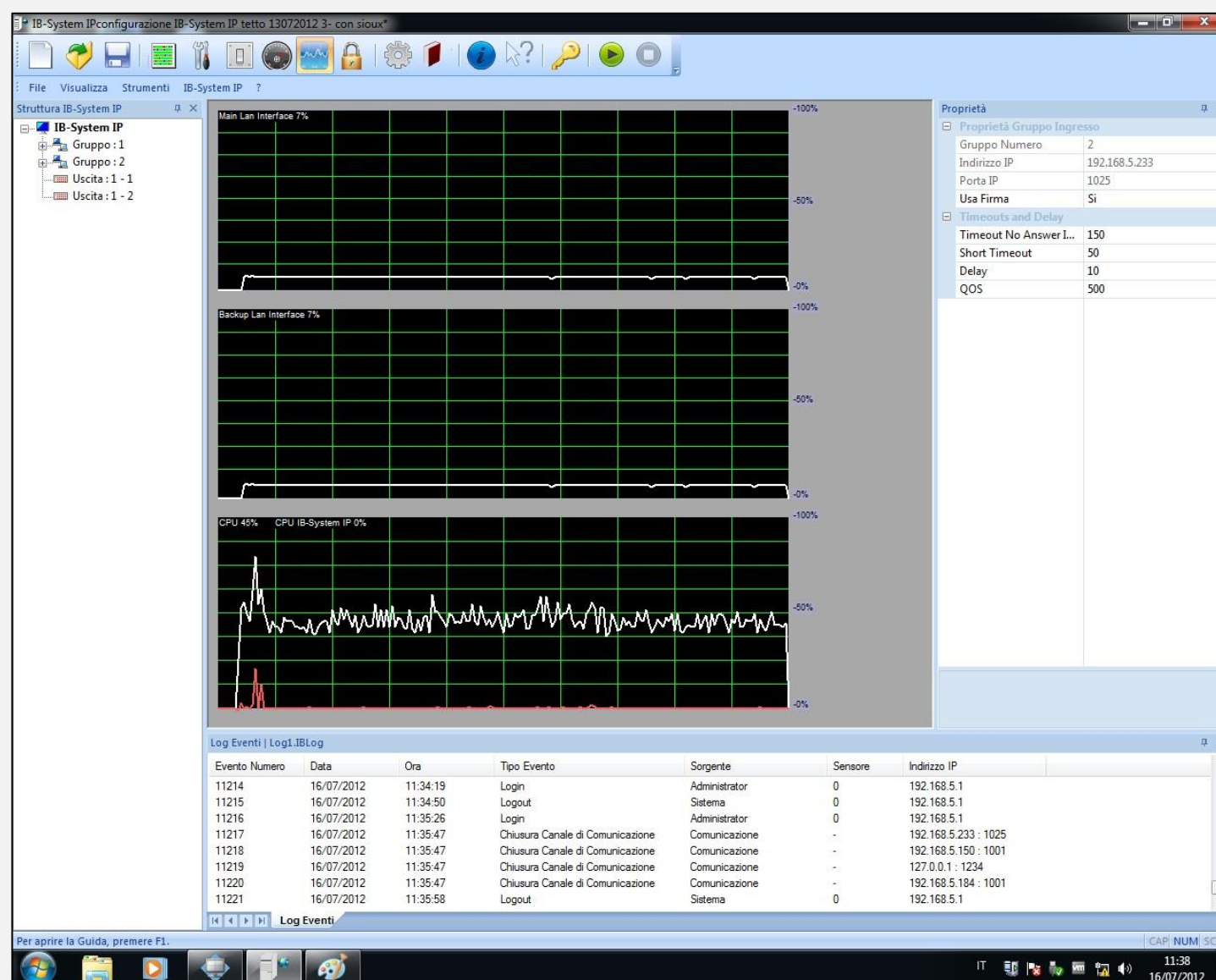
- Quality of Service is linked to each group (represented with 3 colors)
- It represents average polling time of the group
- Green = within set up time
- Yellow = up to double the set-up time
- Red = beyond the set-up time





# IB-System IP

Analysis of LAN and CPU network load



## Functions:

- It displays network load for main LAN board and for backup LAN board (optional)
- It displays CPU load for PC and IB-System IP

# IB-System IP

OFF mode

IB-System IP  
15:33:52



## Functions:

- Default screenshot of operation mode (exit only with password)
- MAIN SERVER
- BACKUP SERVER

# IB-System IP

## Event Log Manager

Event Log Manager

Log1.IBLog | Number of Events : 1269

Event Number	Date	Time	Event Type	Source	Sensor	IP Address
10001	16/07/2012	02:29:52	Device Prealarm Stop	Field	15	192.168.5.150 : 1001
10002	16/07/2012	02:30:06	Device Prealarm Start	Field	15	192.168.5.150 : 1001
10003	16/07/2012	02:30:09	Device Prealarm Stop	Field	15	192.168.5.150 : 1001
10004	16/07/2012	02:30:24	Device Prealarm Start	Field	15	192.168.5.150 : 1001
10005	16/07/2012	02:30:26	Device Prealarm Stop	Field	15	192.168.5.150 : 1001
10006	16/07/2012	02:30:40	Device Prealarm Start	Field	15	192.168.5.150 : 1001
10007	16/07/2012	02:30:43	Device Prealarm Stop	Field	15	192.168.5.150 : 1001
10008	16/07/2012	02:30:57	Device Prealarm Start	Field	15	192.168.5.150 : 1001
10009	16/07/2012	02:31:00	Device Prealarm Stop	Field	15	192.168.5.150 : 1001
10010	16/07/2012	02:31:15	Device Prealarm Start	Field	15	192.168.5.150 : 1001
10011	16/07/2012	02:31:17	Device Prealarm Stop	Field	15	192.168.5.150 : 1001
10012	16/07/2012	02:31:32	Device Prealarm Start	Field	15	192.168.5.150 : 1001
10013	16/07/2012	02:31:34	Device Prealarm Stop	Field	15	192.168.5.150 : 1001
10014	16/07/2012	02:32:04	Device Prealarm Start	Field	15	192.168.5.150 : 1001
10015	16/07/2012	02:32:08	Device Prealarm Stop	Field	15	192.168.5.150 : 1001
10016	16/07/2012	02:32:39	Device Prealarm Start	Field	15	192.168.5.150 : 1001
10017	16/07/2012	02:32:43	Device Prealarm Stop	Field	15	192.168.5.150 : 1001
10018	16/07/2012	02:32:48	Device Prealarm Start	Field	15	192.168.5.150 : 1001
10019	16/07/2012	02:32:52	Device Prealarm Stop	Field	15	192.168.5.150 : 1001
10020	16/07/2012	02:34:14	Device Prealarm Start	Field	15	192.168.5.150 : 1001
10021	16/07/2012	02:34:17	Device Prealarm Stop	Field	15	192.168.5.150 : 1001
10022	16/07/2012	02:34:30	Device Prealarm Start	Field	15	192.168.5.150 : 1001
10023	16/07/2012	02:34:34	Device Prealarm Stop	Field	15	192.168.5.150 : 1001
10024	16/07/2012	02:34:56	Device Prealarm Start	Field	15	192.168.5.150 : 1001
10025	16/07/2012	02:34:59	Device Prealarm Stop	Field	15	192.168.5.150 : 1001
10026	16/07/2012	02:35:05	Device Prealarm Start	Field	15	192.168.5.150 : 1001
10027	16/07/2012	02:35:08	Device Prealarm Stop	Field	15	192.168.5.150 : 1001
10028	16/07/2012	02:35:30	Device Prealarm Start	Field	15	192.168.5.150 : 1001
10029	16/07/2012	02:35:33	Device Prealarm Stop	Field	15	192.168.5.150 : 1001
10030	16/07/2012	02:35:48	Device Prealarm Start	Field	15	192.168.5.150 : 1001
10031	16/07/2012	02:35:50	Device Prealarm Stop	Field	15	192.168.5.150 : 1001
10032	16/07/2012	02:36:05	Device Prealarm Start	Field	15	192.168.5.150 : 1001
10033	16/07/2012	02:36:07	Device Prealarm Stop	Field	15	192.168.5.150 : 1001

Commands

Open Log File

Create Filter

Delete Filter

Export xls

Export pdf

Close

## Functions:

- It displays log files (i.e. a file with 10,000 events)
- It allows creation of filters
- It exports logs into pdf/excel



# IB-System IP

## Key Option

**Key Options**

**Key Data**

Key ID : 2273EDD9 ☒ Main Server / Backup Server (Selected = Main Server)

Devices Number : 320 ☐ Backup Enabled

Key Time : Day:90 - Hours:20 - Minutes:10 ☐ Reserve Key

Time to Expire : No Expire

**Plugin**

Plugin1 : c-one-bus	Plugin8 : None
Plugin2 : Milestone	Plugin9 : None
Plugin3 : None	Plugin10 : None
Plugin4 : None	
Plugin5 : None	
Plugin6 : None	
Plugin7 : None	

**Key Update**

To Update the current licence Key :  
 1- Select the Update File;  
 2- Insert the Update PIN;  
 3- Press the Update Button

Update File Path : C:\

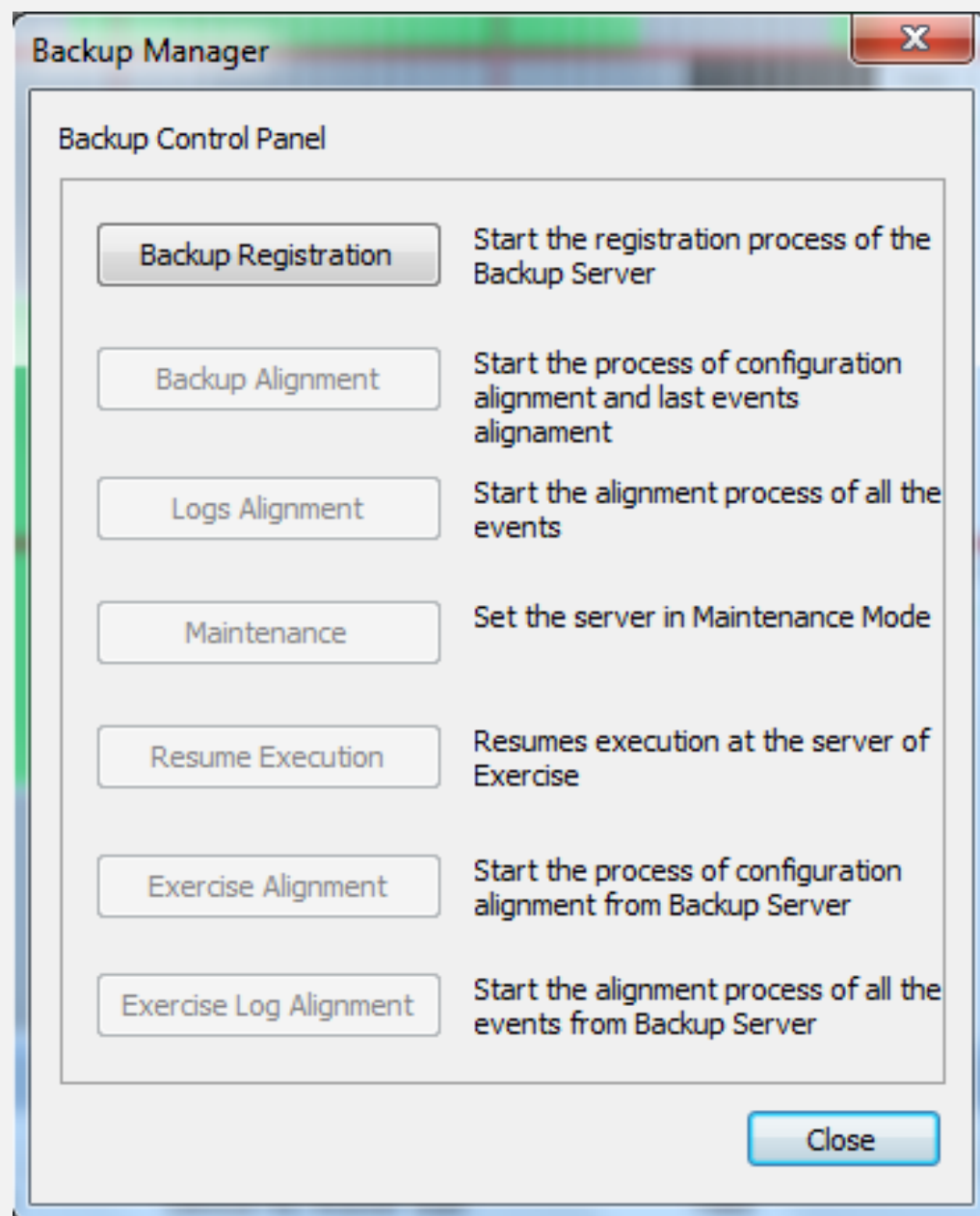
Update PIN :

## Functions:

- Informations relevant to the licence linked to hardware key
- Maximum number of devices to handle
- Operating time and time to deadline (if any)
- Main/backup or extra key
- Active plug-in
- Key updates (implementations, added sensors, plug-in)

# IB-System IP

## Backup Manager

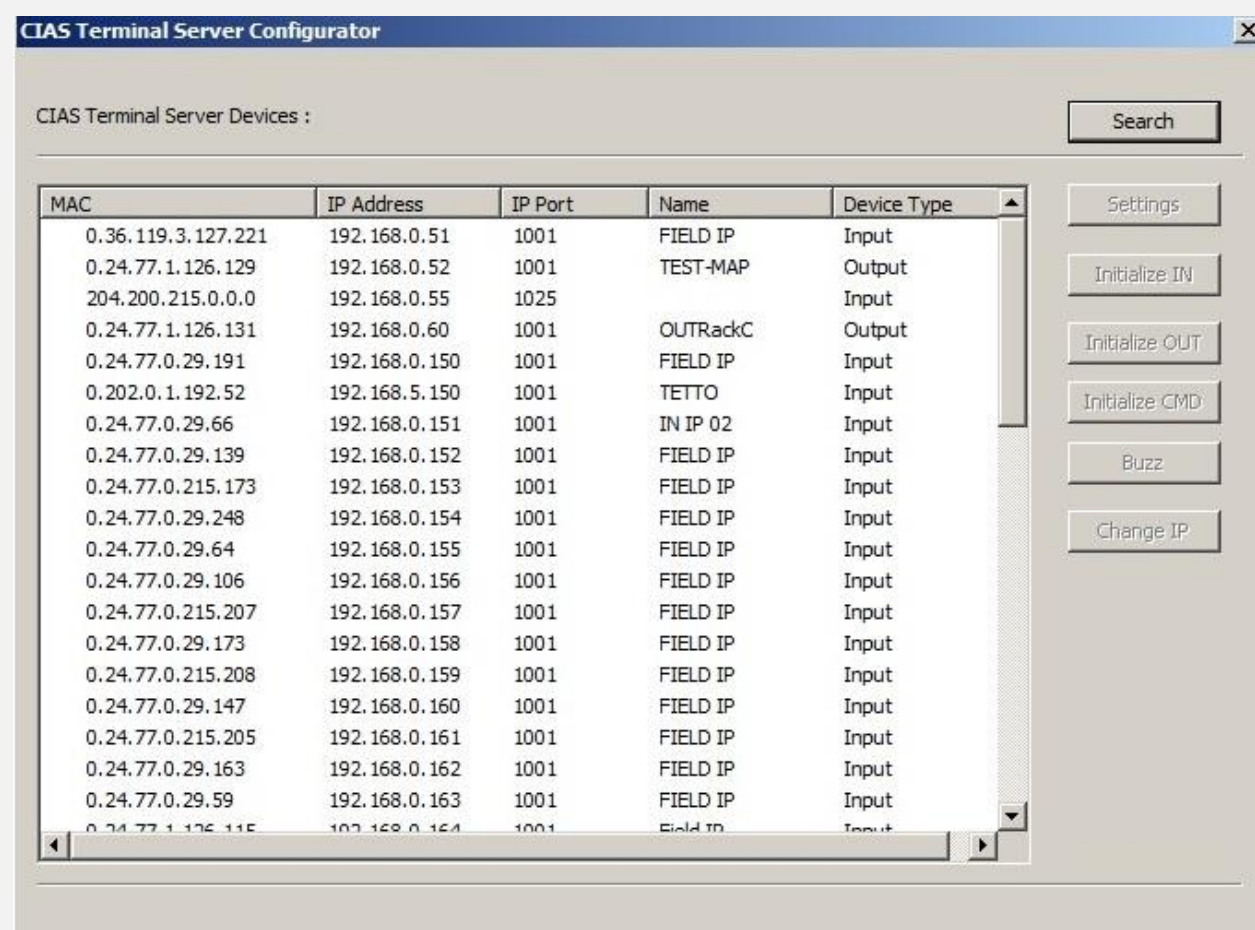


### Functions:

- HOT Backup within 5 seconds from drop of MAIN SERVER
- BACKUP recording
- BACKUP alignment with SERVER (log struct)
- SERVER alignment with BACKUP (log struct)
- Maintenance Function for performing SERVER maintenance
- Abilitazione del ripristino MAIN SERVER (Automatico o manuale)

# IB-System IP

## FMCREP-ETH Configurator



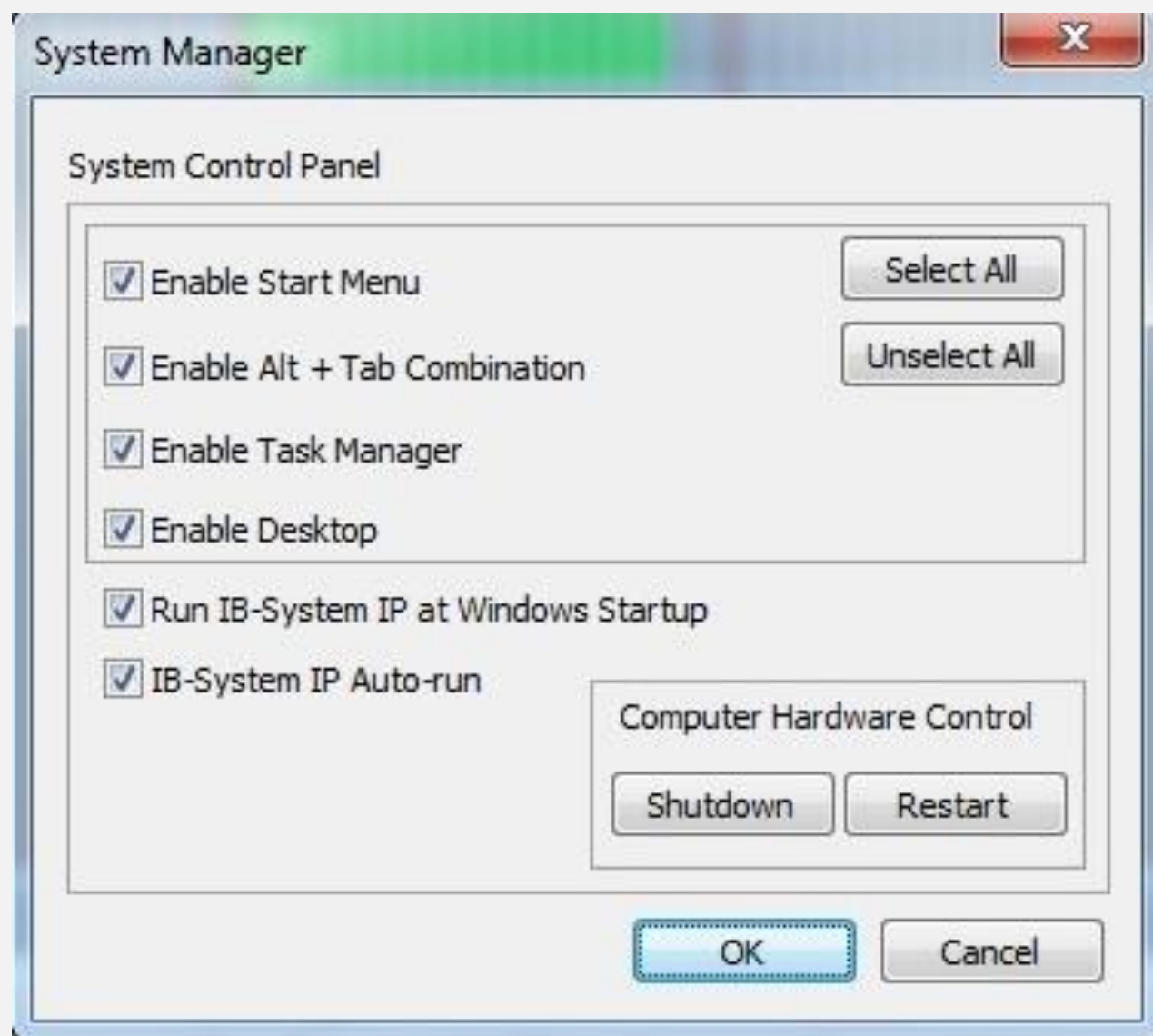
### Functions:

- IP/ports address set-up
- Input/Output/Control keys set-up as device
- Buzz (network led blinking on FMCREP)
- Password set-up, name, etc.



# IB-System IP

## System manager



## Functions:

- It starts/disables Windows “control” options
- It gets IB-System IP going at PC re-start (set auto POWER ON in PC BIOS and auto LOGIN user in Windows)
- Autorun of last configuration loaded at program start

# IB-System IP

## CIAS SUPERVISOR

