

# The integrated solution beyond security





MADE IN ITALY



# ULTRA



## The system for any environment, up to 1.000 zones.

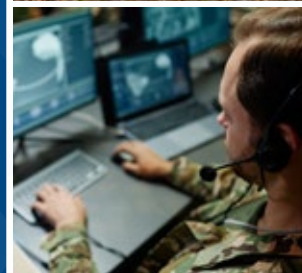
ULTRA is a range of control panels that **integrate multiple solutions in a single system.**

ULTRA is **Intrusion Protection**, ULTRA is **Smart Home**, ULTRA is **Video Verification**, ULTRA is **Building Automation**, ULTRA is **Access Control**, ULTRA is in the **Cloud!**

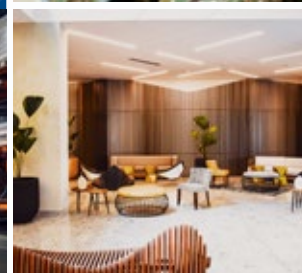
Ultra is a **modular, hybrid (wired and wireless), IP, BUS and 4G system.** A complete range of devices allows the system to be adapted to multiple installation requirements.



Critical infrastructures



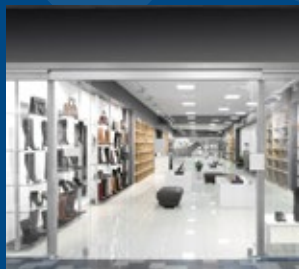
Military & penitentiary applications



Hospitality



Residential



Commercial



Industrial

## RANGE

The ULTRA range consists of **4 control panels with different features** that are perfectly suited to all application contexts: residential, commercial, industrial, hospitality, military & penitentiary and critical infrastructures.

## INTEGRATION

The **Ultra system** integrates with **IoT technology digital solutions**. Thanks to the **powerful MyAVS Cloud**, both the User and the System Integrator can manage the system easily and flexibly through **dedicated APPs and Software**.

## CONTROL

Ultra is designed to make even the most difficult applications easy. **Configuration of the Ultra system** is in fact **facilitated through the 'Adaptive Programming' function** available on the **powerful and advanced 'BIOS' Cloud Software**, which allows the system to be programmed intuitively, reducing start-up times.

ULTRA is designed to simplify the **user experience** with the **T8 and T10 (8" and 10") touch screen keypads** that combine aesthetics and functionality in a single instrument. Added to this range is the elegant **A1000 Touch Sense keypads**, with graphical display.



Touchscreen T8 & T10

A1000 Touch Sense keypads



Android TI



Quad core Cortex A55



R345 with POE



WiFi



Bluetooth 5.2



RS485 Connection

VIDEO VERIFICATION CCTV

ACCESS CONTROL

VIDEO INTERCOM

SMART HOME

BUILDING AUTOMATION

PSIM SUPERVISION PLATFORMS

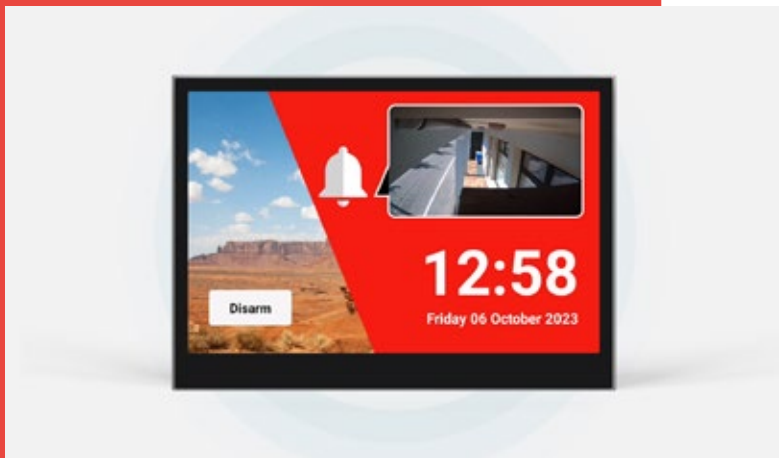
SOFTWARE

TECHNICAL DATA



 **ULTRA**

Compatible with



# VIDEO VERIFICATION CCTV



## Video Verification with integrated Onvif®(S) cameras and NVRs Dahua® - Provision® - Hikvision® - TVT®

The integrated Video Verification function allows you to **verify and confirm a received alarm report by quickly and easily receiving a push notification on your smartphone complete with a video of the alarm instant.**

Videos saved and recorded in the Cloud can also be verified later. **Live video from the cameras** can also be accessed directly, either locally or remotely.

Video verification is **compatible with Onvif® (S) cameras** or by **integrating a video surveillance system** with Dahua® - Provision® NVRs - Hikvision® - TVT®.

## IP Zones

The ULTRA System goes beyond the traditional concept of intrusion detection based on the management of wired or wireless inputs, introducing the **integration of “IP zones” that generate an alarm via the HTTP protocol.**

This new network technology makes it possible to hook up to third-party devices capable of generating an HTTP request (GET or POST), thus opening up the ULTRA system to a true revolution.

## Video analysis alarm management

This function is most used to link **up to 30 networked IP cameras** to the control panel **or direct to NVR.**

The cameras thus become part of the intrusion detection system, acting as a detection sensor through the integrated **video analysis function.**

## Camera Presence Management

Camera presence management increases the security level of the system by **detecting and reporting any tampering or failure.**



Compatible with



suprema INTEGRATION PARTNER



# ACCESS CONTROL



## Proximity reader NFC in RS485 with tag AVS

The Ultra system manages up to a **maximum number of 1000 user codes**, defined with different attributes and permissions **offering customised levels of access**.

Codes can be used to manage the system from the **keypad** or **through NFC proximity readers combined with AVS tags**.

Numerous commands can be carried out with AVS Electronics keypads and AVS tags: from switching the system On and Off, to opening gates.

The **RS-KS reader** features high-intensity multicolour LEDs to display the status of the system. The mounting system **designed on standard KEYSTONE RJ45** makes the RS-KS reader adaptable to **all civil series**.

## Integration of biometric readers

Responding to the growing need for security and control of high-risk environments or for increased access protection, ULTRA control panels integrate biometric **user recognition functionality**. AVS Electronics has started collaborating with some of the industry's leading technology partners such as ZK-TECO® and SUPREMA® for the **native integration of communication protocols**, which simplify system configuration, with the functions of:

- ◇ User biometric recognition
- ◇ Switch ON/Switch OFF control panel
- ◇ Activation and control of outputs and gates

## Integration of ZK-TECO® biometric readers (model V4L/V5L/PROFACE X)

Up to 8 biometric readers **connected directly** and not via server.

## Integration of SUPREMA® biometric readers in TCP-IP mode

**Directly with the BIOSTAR software platform.**

## Integration with WIEGAND protocol

Thanks to the AVS RS WG interface, the ULTRA control panel can integrate directly via RS485 with access control devices compatible with the Wiegand protocol.

## Integration with the OSDP (Open Supervised Device Protocol)

The ULTRA control panel can integrate directly via RS485 with devices compatible with the OSDP protocol.



 **ULTRA**



# VIDEO INTERCOM



## Video Intercom integration

The **Ultra system** integrates the **Video Intercom function on SIP Protocol**, compatible with the main brands on the International market.

The integration allows the call from the **video door phone** to be displayed locally on the **T8 and T10 Touch keypads** in the system.

In addition, the user will also be able to **view calls from the video door phone remotely via the My AVS Alarm APP**.



Intercom function and live view, even remotely



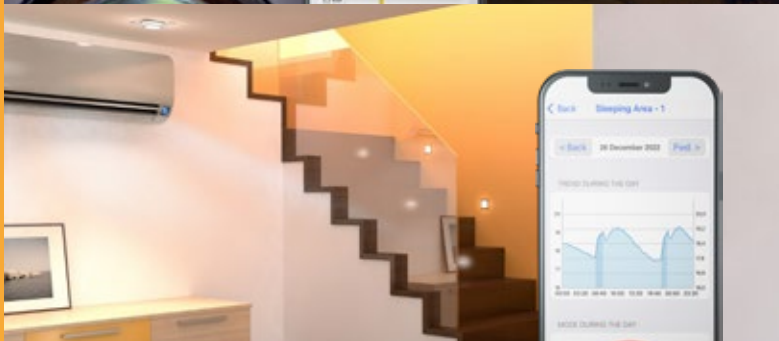
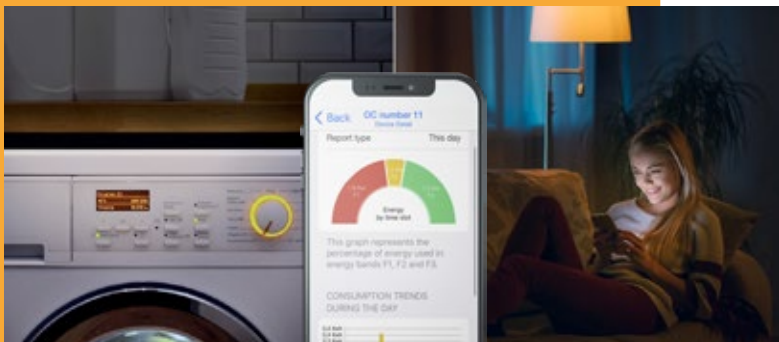
T8 - T10 AVS Electronics touchscreen keypads



8" 10" full screen capacitive touch panel



Compatible with



# SMART HOME



## Make your environments smart with AVS Electronics

AVS Smart Home turns every environment into an intelligent, efficient, and comfortable space. Control lights, climate, and devices easily, even remotely. More convenience, less waste, maximum comfort.

With AVS Smart Home, everything is always under your control.

## Electrical consumption monitoring

Through the APP you can choose which appliances to keep running in case of energy overload.

**Electrical consumption monitoring:** graphic display of consumption on the APP , representing daily, weekly, monthly and annual trend. Creation of monthly reports available on the App and/or sent by email.

## Set-up and manage temperature

You can control your own comfort, schedule days and times, monitor the temperature **in real time for each single room or environment**. The APP displays graphically the temperature of every room.

## Command motorized devices

You can control motorized indoor or outdoor blinds, shutters, rolling shutters, gates and other motorized systems **wherever you are via the APP or your touchscreen keypads**.

## Control and manage lighting

You can turn the lights on, off, dim them and **create automated scenarios for every moment of your day**, anytime via the APP or your touchscreen keypads.



Smart environments



Motorized devices



Manage temperature



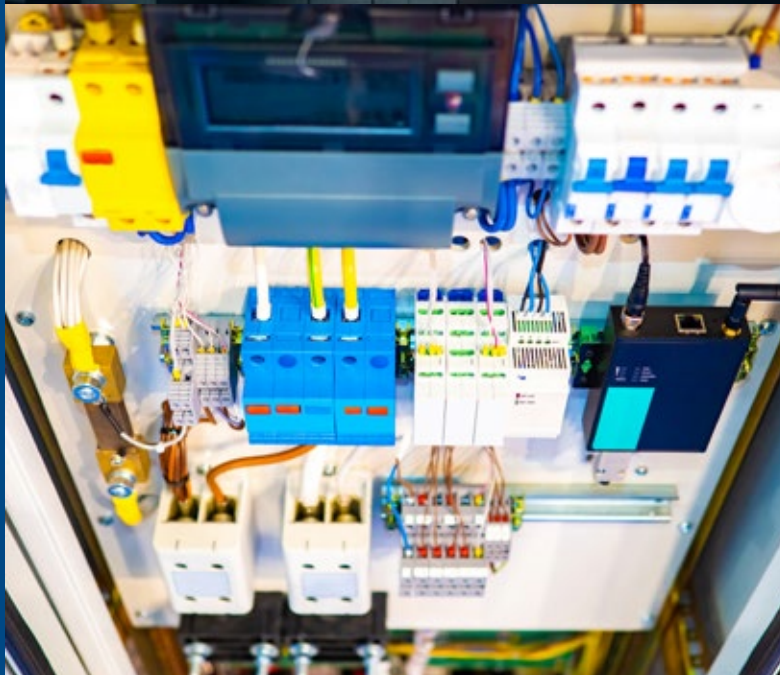
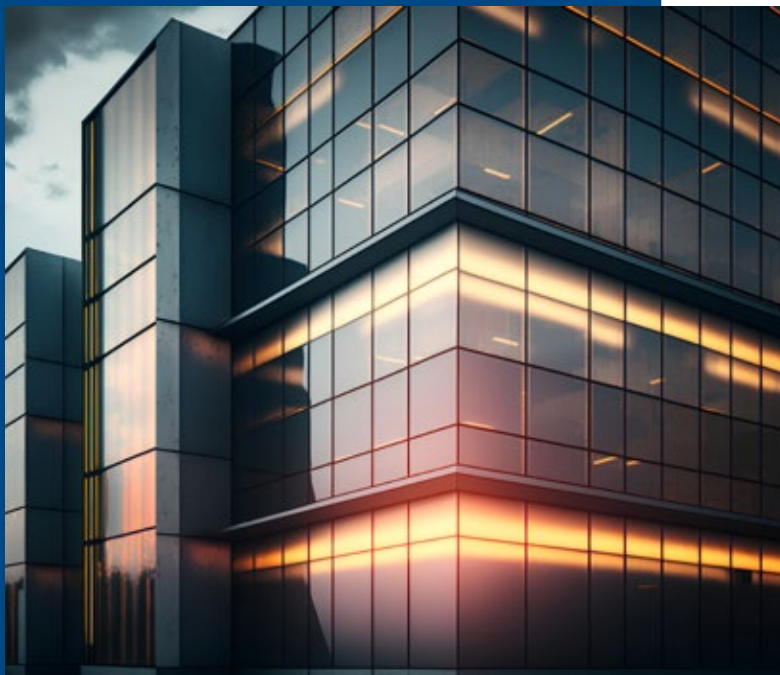
Consumption monitoring



Manage lighting



Compatible with



# BUILDING AUTOMATION



## The ULTRA system is the ideal solution for the building automation

Through the native Modbus protocol, MQTT and Node-RED (coming soon), the System Integrator can network ULTRA with the main industrial control platforms, **for safety at the highest level.**

## ULTRA will be a client in a comprehensive service network

## The XGATE gateway (optional)

Will enable ULTRA to integrate with the KNX® standard.

## The HTTP gateway

Available in the ULTRA system, offers the developer and system integrator the possibility of realising **fully customised APIs command.**



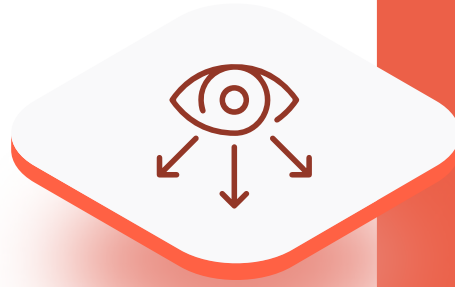
Compatible with



**GENETEC**



# PSIM SUPERVISION PLATFORMS



## Building supervision, integration and control software

The **Ultra system** through its **native TCP-IP connectivity** can connect to supervision platforms via the proprietary AVS Electronics protocol and native MODBUS. Collaboration with major brands in the international market allows the System Integrator to offer integrated **high security solutions for the supervision and control of buildings**.

## PRESIDIUM PLUS

### Centralisation software with graphical maps developed by AVS Electronics

PRESIDIUM PLUS is a **software that centralizes one or more AVS Electronics control panels** on a local LAN - TCP-IP network, remotely via ADSL and also in CLOUD MyAVS.

PRESIDIUM PLUS offers simple and intuitive management of the intrusion detection system, visualization and management of the system with **dynamic adaptation of the graphic map** to the size of the screen.

PRESIDIUM PLUS allows to visualize and interact with zones, areas, sectors, and outputs, and is complete with an **audio-voice synthesizer to communicate system status changes in real time**. In case of intrusion, the map with the alarmed zone is automatically displayed.

PRESIDIUM PLUS can **play back and record images from IP cameras** (RTSP, ONVIF, MJPEG) connected to the network via TCP-IP

PRESIDIUM PLUS integrates user management with privileges and allows **authentication with a local database, or authentication with LDAP** (Lightweight Directory Access Protocol) databases; users defined in the Windows® domain.

The software is activated on a software license which, depending on the version, allows to manage **from 50 up to 250 connected systems**.

## Integrated Platforms:

- ◇ **Genetec™ Security Center (GSC):** a new plug-in designed to seamlessly integrate ULTRA control panels into Genetec supervision systems, enabling an even more advanced security management experience. Thanks to direct import from BIOS, all system data (zones, areas, outputs, events) can be instantly managed within an internationally recognized enterprise platform.
- ◇ **Cathexis** is a VMS (Video Management System) solution that allows multiple sites and third-party integrations to be managed through a single platform.
- ◇ **WinGuard ADVANCIS** is a PSIM (Physical Security Information Management) system, an open software platform for visualizing and controlling the entire technical infrastructure of a building.
- ◇ **C.G.C.** is a supervision software based on the SBI platform: access and presence control, surveillance, monitoring, and intelligent building management.
- ◇ **Other PLATFORMS in progress.**



 **ULTRA**



# PROGRAMMING PLATFORM



## Bios platform

Bios is the ULTRA system programming platform based on the **proprietary Cloud Server**.

This solution allows the configuration of the system by **simply using an internet browser**, in a local TCP-IP network, **in the Cloud, in direct USB connection** and **also in OFF-LINE mode**.

Bios is the ideal solution for managing systems with total freedom and security.

Bios enables:

- ◇ Real time diagnostics
  - ◇ Block diagram of the system
  - ◇ Event memory download
  - ◇ System Validation Test
- ◇ Authorisation management
- ◇ Customer/Systems data management
- ◇ Back-up programming
- ◇ Remote firmware update with Bios



**ULTRA**  
*bios*


## TECHNICAL FEATURES


	Ultra 32	Ultra 64	Ultra 128	Ultra 1000
<b>FUNCTIONAL CHARACTERISTICS</b>				
Partitions	8	16	32	64
Arming for partitions	4	4	4	4
Non volatile- memory events	5000	5000	10000	10000
A300-A500-A600-ICE keypads connected on RS485 BUS	8	16	24	48
T8 - T10 TOUCH SCREEN keypads - connected on TCP-IP (LAN and WIFI)	4	8	12	16
Installer codes	2	2	2	2
User codes and emergency codes	128	512	512	1000
Temporary user codes	128	512	512	1000
Inputs (max number available with expansion modules)	32	64	128	1000
Outputs (max number available with expansion modules)	72	128	200	400
RS485 BUS	1 + 2 optional	1 + 2 optional	1 + 2 optional	1 + 2 optional
Build-in Ethernet LAN to manage Cloud/APP and integration protocols	✓	✓	✓	✓
Build-in USB connection	✓	✓	✓	✓
Digital vocal message module with text to speech function	art: DIGIVOC U - optional			
PSTN dialer	art: PSTN U - optional			
GSM telephone dialer (Voice over LTE) sending vocal protocols/digital protocols and SMS - 4G VoLTE	art: GSM U 4G - optional			
<b>INPUTS - OUTPUTS</b>				
Input/Output terminals on control panel board	8	8	8	8
Inputs on plug-in extension board	art: XEXP8 - optional			
Inputs connection: 1R - 2R - 3R - NO - NC e SWITCH ALARM	✓	✓	✓	✓
3R connection for double zones	✓	✓	✓	✓
3R connection for Alarm - Tamper - Antimasking detection	✓	✓	✓	✓
EOL personal sable Balan cement with automatic input resistor detection	✓	✓	✓	✓
Configuration for single zone	30	30	30	30
Double zone profile	✓	✓	✓	✓
Mapping software zones-physical inputs	✓	✓	✓	✓
AND ZONE function	16	16	128	128
RS485 BUS speed management (low and high speed)	✓	✓	✓	✓
RS485 BUS expansion (wired inputs-outputs and HP device) XSAT series	8	16	24	48
RS485 BUS wireless expansion XSAT WS4 series	8	16	24	48
Open collector outputs available on control panel board	7	7	7	7
Relay outputs with positive security (maximum expansion) available on control panel board	1	1	1	1
Relay outputs with positive security (max number available with expansion modules)	9	17	25	49
<b>HP DEVICES CONNECTED ON RS485 BUS</b>				
HP sirens connected on RS485 BUS	8	8	16	24
XSAT PW power supplies connected on RS485 BUS	8	16	24	48
HP detectors connected on RS485 BUS	max. 32	max. 32	max. 32	max. 32
<b>KEYS &amp; CODES</b>				
Time slot user management	✓	✓	✓	✓
NFC keys/tags with user recognition	128	512	512	1000
Remote controls with user recognition	128	512	512	1000
<b>PROXIMITY &amp; NFC READERS</b>				
RS Series Transponder Addressable Proximity Readers (TOUCH key)	max. 48	max. 48	max. 48	max. 48
RS KS Series NFC Addressable Proximity Readers (TOY L tag) with keystone sockets	max. 48	max. 48	max. 48	max. 48
<b>LAN &amp; WIFI OPTIONAL BOARDS FOR TCP-IP</b>				
Wi-Fi Interface	art: eweb plus Wi-Fi - optional			
ETHERNET interface with VIDEOVERIFICATION and WEB SERVER function	art: eweb plus video - optional			
<b>SYSTEM DIAGNOSTIC</b>				
Check for: System consumption / fuse status / serial BUS status	✓	✓	✓	✓
Dynamic Battery Test with Deterioration Analysis	✓	✓	✓	✓
RS485 BUS power supplies checking	✓	✓	✓	✓
Battery recharge limitation	✓	✓	✓	✓
Controls and MICROPROCESSOR SUPERVISOR	✓	✓	✓	✓
Firmware update by CLOUD/IP/USB	✓	✓	✓	✓
Firmware update for new generation wireless devices	by SW with HW key			
Automatic detection of BUS devices connected	✓	✓	✓	✓
<b>TELEPHONE COMMUNICATOR</b>				
Telephone numbers	16	32	32	64
Available protocols: Digital / Voice / Digital-HP / e-mail / SMS	✓	✓	✓	✓
Digital protocols: SIA I - SIA II - SIA III - CONTACT ID	✓	✓	✓	✓
Dynamic management of PSTN / backup GSM dialer	✓	✓	✓	✓
Dynamic management of internet connection - TCP-IP / backup GPRS	✓	✓	✓	✓


## TECHNICAL FEATURES


	Ultra 32	Ultra 64	Ultra 128	Ultra 1000
<b>VOCAL MESSAGES</b>				
Digital vocal message module with automatic text to speech function by zone labels ( using pc software)	art: DIGIVOC U - optional			
Interactive voice with online help for complete remote system management with telephones (RTC- DTMF)	✓	✓	✓	✓
<b>TIME PROGRAMMER</b>				
Weekly timer	✓	✓	✓	✓
Bank Holidays management	20	20	20	20
Operations programming in or out Bank Holidays	✓	✓	✓	✓
Daily Operations: Partitions On/Off	✓	✓	✓	✓
Outputs: on/off. Activation Alerts	✓	✓	✓	✓
Special user enabling: enabling to activate the extraordinary	✓	✓	✓	✓
Enabling to forced disarming	✓	✓	✓	✓
Astronomic clock	✓	✓	✓	✓
<b>POWER SUPPLIES</b>				
Power supply	Ultra S (25W) 1,7 A	Ultra M (50W) 3,4 A	Ultra L (50W) 3,4 A	Ultra XL (75W) 5A
Batteries	12 Vdc 7 Ah	12 Vdc 7 to 12 Ah	12 Vdc 7 to 17 Ah	12 Vdc 2x17 Ah
Material	ABS	METAL	METAL	METAL
Box dimensions (LxHxD)	275 x 275 x 99 mm	278 x 304 x 109 mm	330 x 420 x 117 mm	380 x 490 x 110 mm


## INTEGRATIONS


	<b>VIDEO VERIFICATION - CCTV INTEGRATION</b>	Ultra 32	Ultra 64	Ultra 128	Ultra 1000
	IP zones and video verification with ONVIF(s) cameras	10	20	20	30
	Video analysis alarm management	✓	✓	✓	✓
	Camera presence management	✓	✓	✓	✓
	IP zones and video verification with integrated NVR (Dahua - Provision - Hikvision - TVT)	according to NVR characteristics (max 30)			

	<b>ACCESS CONTROL INTEGRATION</b>	Ultra 32	Ultra 64	Ultra 128	Ultra 1000
	SUPREMA biometric readers - integrated with BIOSTAR servers	✓	✓	✓	✓
	Integration with ZK-TECO - TCP-IP biometric readers	✓	✓	✓	✓
	Built-in Functions - Biometrics - User Recognition - Arming/Disarming - Output Activation	✓	✓	✓	✓
	Management of physical inputs/outputs available on the device	✓	✓	✓	✓
	Integration of Wiegand - OSDP protocol	✓	✓	✓	✓

	<b>VIDEO INTERCOM INTEGRATION - SIP PROTOCOL</b>	Ultra 32	Ultra 64	Ultra 128	Ultra 1000
	Native integration with VIDEO INTERCOM systems - SIP protocol	✓	✓	✓	✓

	<b>SMART HOME INTEGRATION</b>	Ultra 32	Ultra 64	Ultra 128	Ultra 1000
	Max number wireless and RS 485 home automation modules*	72	128	200	400
	Home automation module for monitoring loads and reading energy consumption (MDC200)*	8	8	8	8
	Electrical consumption monitoring with overload priorities organization	✓	✓	✓	✓
	Rooms	128	128	128	128
	Rules	256	256	256	256
	Scenarios	512	512	512	512
	Independent programmable thermostats with 30 min timer	128	128	128	128
	Touch chronothermostat on Modbus protocol	128	128	128	128
	* requires compatible expansion module				

	<b>INDUSTRIAL PROTOCOLS</b>	Ultra 32	Ultra 64	Ultra 128	Ultra 1000
	HTTP command IN/OUT	✓	✓	✓	✓
	MODBUS	✓	✓	✓	✓
	Node-RED*	✓	✓	✓	✓
	MQTT*	✓	✓	✓	✓
	*in progress				

	<b>BIOS: SYSTEM PROGRAMMING AND CONFIGURATION</b>	Ultra 32	Ultra 64	Ultra 128	Ultra 1000
	Web server in Cloud - with programming in OFF LINE mode	✓	✓	✓	✓
	Direct connection via USB	✓	✓	✓	✓
	Connection by network LAN - TCP/IP	✓	✓	✓	✓
	Connection via Cloud	✓	✓	✓	✓
	Real-time diagnostics	✓	✓	✓	✓
	Parameters visualization according to the installed devices	✓	✓	✓	✓
	Management of technical reports from the CLOUD	✓	✓	✓	✓

# ULTRA

The integrated solution  
beyond security



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