

Hybrid IoT Control Panels for Security and Home & Building Automation

lares 4.0 description

lares 4.0 control panels are the ideal and the most advanced solution within the IoT technologies, both for Physical Security (Intrusion, Video Surveillance, Access Control) and Home & Building Automation.

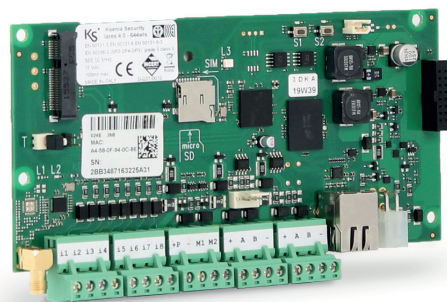
All lares 4.0 are hybrid (wired and wireless) and have a number of outputs equal to the number of inputs for lights, HVAC, irrigation, shutter blinds and any other kind of automation or household appliance. The control panel can be managed by the end-user through an App called lares 4.0 and can be programmed by the Installer via any mobile terminal, thanks to the Ksenia Pro App.

Ksenia PRO App allows you to centralize and geo-locate all the installed control panels and offer the best assistance to the end-user by receiving push notifications, even technological alerts; by implementing a web server inside the motherboard, no PC programs are required, remote configuration takes place via web (locally or via the Ksenia SecureWeb cloud).

Regardless of the model of lares 4.0, the motherboard is designed with an Ethernet interface, 8 input terminals and 2 terminals that can be configured as inputs or outputs. The control panel is available in two versions: with one BUS (compatible, except for some exceptions, with all existing Ksenia BUS devices) or double BUS and 868MHz bi-directional wireless transceiver (compatible with all existing Ksenia wireless devices). The motherboard is also designed with a Micro SD Slot for create and restore backup local configuration and for upgrade the system, a connector for 4G/LTE module and a connector for PSTN module. It is possible to configure and send voice messages, emails, sms, push notifications, Contact ID and SIA DC-09 level III protocol to the Surveillance Centers.

lares 4.0 control panel is designed to optimally take the strictest installation and management conditions and for the most "sensitive" applications.

The motherboard can be installed inside our metal boxes. Together with the motherboard you can install inside up to 7 expansion modules, a 18Ah backup battery and a 50W switching power supply.



lares 4.0 - 644wls*



lares 4.0 - 16



lares 4.0 - 40



lares 4.0 - 40wls



lares 4.0 - 140wls

lares 4.0 versions and characteristics

Ksenia pro and lares 4.0 APPs included

KSI1400016.300 - lares 4.0 - 16

up to 16 IN + 16 OUT with 6 partitions - native with Ethernet interface.

KSI1400040.300 - lares 4.0 - 40

up to 40 IN + 40 OUT with 12 partitions - native with Ethernet interface.

KSI1410040.300 - lares 4.0 - 40wls

up to 40 IN + 40 OUT with 12 partitions native with Ethernet interface and 868 MHz bidirectional wireless (DPMS technology - Dynamic Power Management System) and double BUS on board.

KSI1410140.300 - lares 4.0 - 140wls

up to 140 IN + 140 OUT with 20 partitions native with Ethernet interface and 868 MHz bidirectional wireless (DPMS technology - Dynamic Power Management System) and double BUS on board.

KSI1410644.300 - lares 4.0 - 644wls*

up to 644 IN + 644 OUT with 30 partitions (and beyond on specific project): native with Ethernet interface and 868 MHz bidirectional wireless (DPMS technology - Dynamic Power Management System) and double BUS on board.

**lares 4.0 - 644wls: for projects with a number of zones and/or outputs higher than the 644 already available, it is possible to study a custom solution.*

CERTIFICATIONS

lares 4.0

EN 50131-1:2006 + A1:2009 + A2:2017 + A3:2020
EN 50131-3:2009, EN 50131-6:2017, EN 50131-10:2014,
EN 50131-5-3:2017

EN 50136-1:2012 + A1:2018, EN 50136-2:2013
EN 62368-1:2020 + A11:2020

Grade 3 - Class II

T031: 2017 + A1:2018 + A2:2022

SSF 1014 Larmklass 3



App Ksenia Pro
Installer



App lares 4.0
User

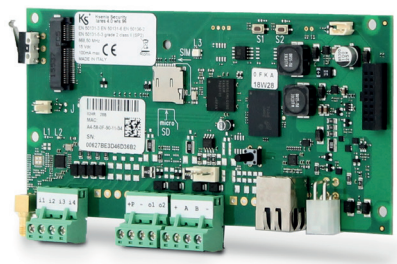


5 years warranty

Performances and capacities

lares 4.0 allows you to manage up to 5 simultaneous HTTPs connections with loading times of a few seconds, storing hundreds of screenshots from the supported IP cameras, doing the backup of local programming on SD-card, etc.

- Flash memory (space code):	4 MB
- RAM:	512 KB
- CPU Clock:	240 MHz
- Drystone MIPS (Mln. Instr. per sec.):	480
- NOR data memory:	32 MB
- NAND data memory (eMMC):	4 GB
- SD card slot:	yes



lares 4.0 wls 96



App Ksenia Pro
Installer



App lares 4.0
User



5 years warranty

KS1410096.300 - lares 4.0 wls 96

It is able to manage up to 96 zones, of which 40 wired and 18 outputs. It can be expandable with an KS-BUS: up to 3 user interfaces (to be chosen among ergo keypad, volo and volo-in proximity readers), 1 BUS siren (imago or radius), 1 domus to manage the functions of the chronothermostat, 6 expansion modules (a choice among auxi, auxi-1 and auxi-H), 2 among opis and divide. IP peripherals management (ergo-T, gemino IoT, porta 4.0, cameras). Complete with siren and wls antenna.

Only for installation on plastic cabinet
KS17305015.011.

KS17305015.011- White plastic cabinet with front opening and screw closure. Supplied with fuse holder, 50W power supply and tamper. It can contain an indoor siren, 4G/LTE and wls antenna, 2 expansion modules and 12V-7Ah lead battery.
Dimensions: 215x288x84.5 mm

CERTIFICATIONS

lares 4.0 wls 96

EN 50131-1:2006 + A1:2009 + A2:2017 + A3:2020,
EN 50131-3:2009, EN 50131-6:2017,
EN 50131-10:2014, EN 50131-5-3:2017,
EN 50136-1:2012 + A1:2018, EN 50136-2:2013
EN 62368-1:2020 + A11:2020

Grade 2 - Class II

T031: 2017 + A1:2018 + A2:2022

SSF 1014 Larmklass R



lares 4.0 wls 96 description

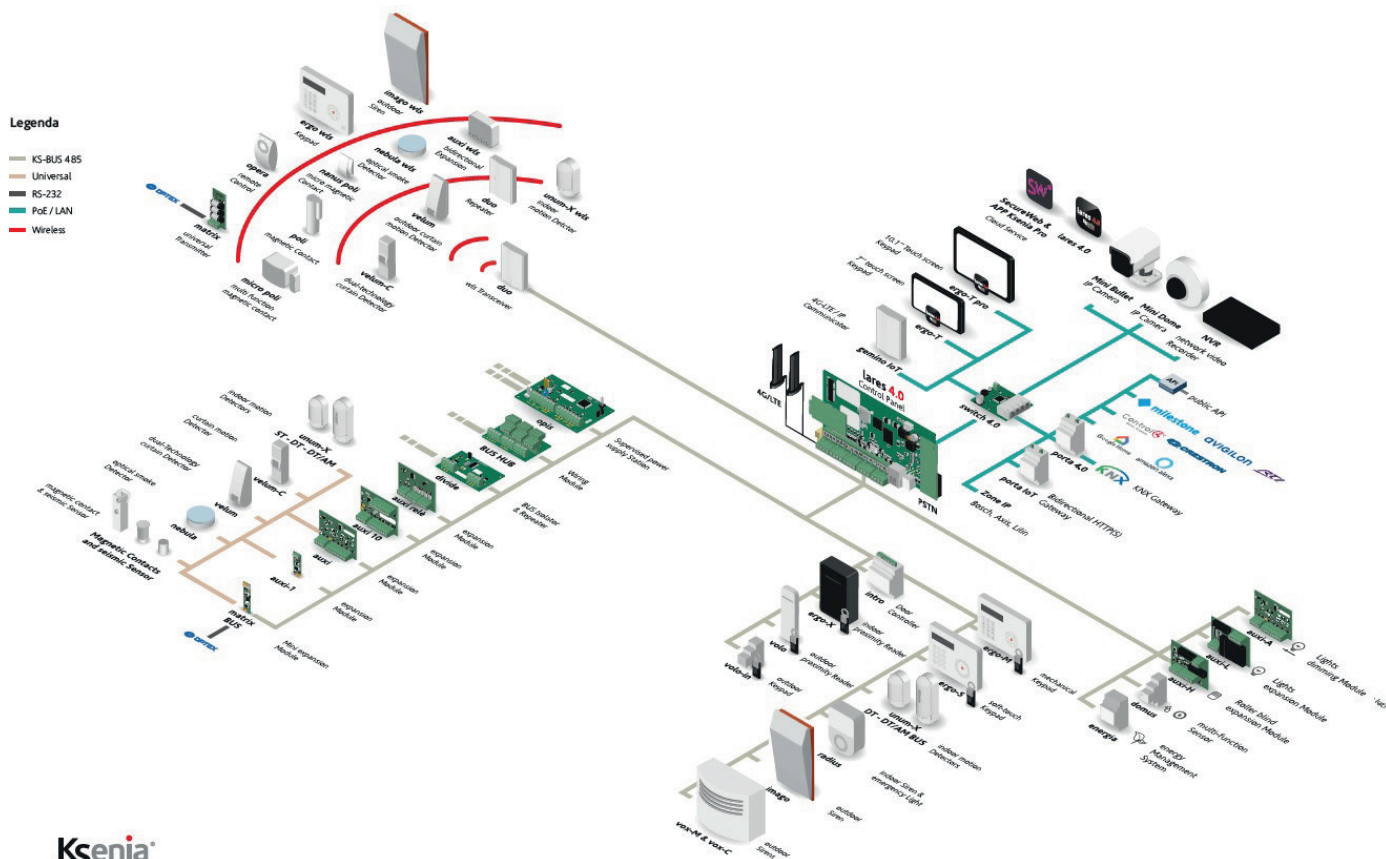
lares 4.0 wls 96 is the wireless version of lares 4.0 family, to which a minimum wire expandability has been added. It is able to manage up to 96 zones (40 wired max) and 18 outputs (16 wireless max), 5 partitions, 4 IP inputs (extended number is available under license).

Technical characteristics of lares 4.0 control panels models, including lares 4.0 WLS 96, described in the next table.

Technical characteristics

Metal box characteristics	KSI7402117.010 (switching power supply 25W)		KSI7305015.011 (switch. power supply 50W)	KSI7403130.010 (switch. power supply 50W)	KSI7404130.010 (switching power supply 50W)	
Dimensions (wxhxd)	255x295x85mm		215x288x84.5 mm	325x400x90 mm	325x440x90 mm	
Backup batteries	7Ah				18Ah	
Max. battery recharge time to 80%	10h				24h	
Power supply voltage	230 V~-15/+10% 50 Hz 0.4A		230 V~-15/+10% 50 Hz 0.8A			
Power Supply Battery Charger (Type A norm EN50131-6)	15V ± 1% 1.7A		15V ± 1% 3.4A			
Maximum current available for external devices and optional modules	580 mA grade 2 230 mA grade 3		1500 mA grade 2 600 mA grade 3			
lares 4.0 control panel	wls 96	16	40	40wls	140wls	644wls
Current consumption (med./stand-by)	50mA	40mA	40mA	60mA	60mA	60mA
Current consumption (max.)	80mA	70mA	70mA	100mA	100mA	100mA
Max. output voltage ripple	120 mV					
Max. current for battery charging	800 mA					
Deep discharge voltage protection	10 V					
Low battery threshold (restore)	<11 V (13 V)					
Low voltage threshold	12 V Voltage below which the power supply output fault is signalled 15.4 V Voltage above which the power supply output fault is signalled					
Maximum number of inputs	96	16	40		140	644
Built-in inputs (fixed + programmable)	4	8	8		8	8
Maximum number of outputs	18	16	40		140	644
Ethernet connectivity management	YES					
Power supply fault detection	YES					
Over voltage protection	YES (17 V)					
Combinations of Digital Key	More than 4 billions					
Alarm transmission system	SP2, DP1, SP4, DP3					
Time for generation and transmission of alarm messages	3 sec.					
Time for detection and presentation failures	10 sec.					
Protection class	IP30					
Security grade	2	3				
Environmental class	II					

Ksenia solutions range



Main features

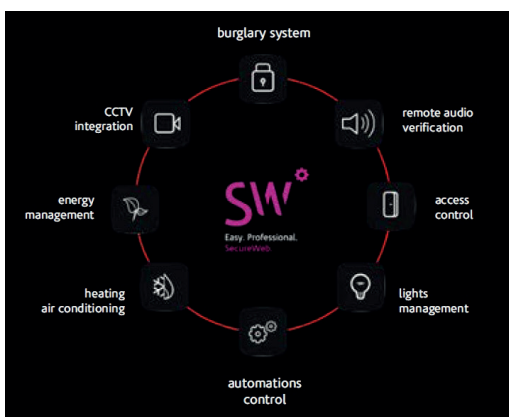
SECURITY

- KS-BUS interface for connecting Ksenia peripherals, which allow to expand the capabilities and functionalities of the control panel. In the wireless versions, the panels have a double BUS on board, the speed is doubled and isolation is also guaranteed even in case of severe failure of one of the two BUS.
- Communication Add-On can be connected to the control panel board: one for the mobile part (4G/LTE), the other one for the PSTN part.
- 4GB eMMC memory to save programming data, event logs, device firmware update, screenshots of IP cameras.
- lares 4.0 monitors both the external power supply voltage and the battery voltage
- Ethernet connectivity: thanks to the Ethernet interface already integrated on the motherboard
- ONVIF compatibility: cameras compatible with the ONVIF protocol (Open Network Video Interfaces Forum) can be integrated without additional cards
- KONNEX compatibility through porta 4.0 device
- Fully integrated with Control4 and Creston world through the development of proprietary drivers
- Fully integrated with Avigilon Control Center through porta IoT device
- Ksenia Security has developed a dedicated plugin allowing the integration of a virtually unlimited number of lares 4.0 with the Milestone XProtect® platform.

- Unlimited virtual voice messages, generated by a text-to-speech (TTS) synthesis engine, available thanks to the Loquendo® libraries of Nuance Communication
- Video verification
- Firmware update remotely with automatic download by the control panel itself or any device.
- Backwards compatible firmware
- Compatibility with future devices, simply by updating the firmware of control panel.

HOME & BUILDING AUTOMATION

- Lighting
- Heating / air conditioning systems
- Irrigation systems
- Automation and load control
- Audio and video surveillance
- Access control
- Rooms/Maps: each device that has been programmed on the system (sensors, outputs, cameras, etc.) can be combined with one or more rooms and an image to each room.
- Voice assistants: integration with Google Home & Amazon Alexa for managing Smart devices through a simple voice command.



lares 4.0 performances

	lares 4.0 wls 96	lares 4.0 - 16	lares 4.0 - 40	lares 4.0 - 40 wls	lares 4.0 - 140 wls	lares 4.0 - 644+
Zones management						
Number of Zones (of wich radio)	96 (96)	16 (16)	40 (40)	40 (40)	140 (140)	644 (192)
Number of wired Zones	40	16	40	40	140	644
Support for IP Zones	●	●	●	●	●	●
Custom EOL Balances	1	2	4	4	14	22
Analog inputs range	1	2	4	4	14	22
Number of Outputs (of which radio)	18 (16)	16 (16)	40 (40)	40 (40)	140 (128)	644 (128)
Virtual Outputs (timer)	●	●	●	●	●	●
On board features						
I/O terminal	2 (Out only)	2	2	2	2	2
Inputs	4	8	8	8	8	8
868MHz radio interface	●	-	-	●	●	●
BUS interface	1	1	1	2	2	2
Indoor Siren Connector	●	-	-	-	-	-
Partitions	5	6	12	12	20	30
Arming Modes	8	8	32	32	64	128
Hashtags	2	2	12	12	20	64
Rooms (graphic maps)	8	12	24	48	64	128
Schedulers	4	8	64	64	64	104
Event log	1500	1500	1500	5000	10000	10000
Users profiles	2	2	12	12	20	64
Number of users	16	16	64	128	512	1024
Programmable Logics	32	8	16	24	40	108
Chrono-thermostats	1	0	8	8	24	40
Counters	4	1	12	12	20	30
Meters (energia)	2	0	3	6	12	18
Scenarios and Notification						
Scenarios	8	8	32	32	128	399
Configurable event groups for scenarios/actions	32	32	64	64	256	756
Contact Lists	8	8	8	8	16	32
Contact ID receivers (pairs)	1	1	3	3	3	3
SIA receivers (pairs)	1	1	3	3	3	3
Configurable event groups for Notifications	16	16	32	32	64	121
IP Expandability						
IP Cameras	4 (8****)	4 (8****)	12 (20****)	12 (20****)	20 (30****)	30(63****)
ergo-T/ergo-T pro	1	2	4	4	8	14
IP Video intercom	1	1	1	1	1	1
gemino IoT	1	1	1	1	1	1
porta 4.0/porta IoT	1	1	1	1	1	1
IP Supervisors (Control 4 and Crestron integration)	1	1	1	1	1	1
BUS Expandability						
User interfaces (ergo; ergo-S/M; ergo-X; volo; volo-in)	3	6	24	24	40	64
I/O modules (auxi-1;auxi; auxi 10; auxi-R; auxi-H; auxi-L, auxi-A)	6*	4**	24	24	64	200
Sirens (radius, imago,vox)	1	6	24	24	40	49
Isolators (divide, opis)	2	4	12	12	20	32
Transceivers (duo)	0	2	2	1 (2***)	1 (2***)	1 (2***)
Home automation sensors (domus)	1	0	8	8	32	64
Load controllers (energia)	1	0	1	3	6	6
BUS sensors (matrix BUS, unum-X BUS)	8	8	40	40	64	64
Access control (intro)	4	4	8	8	12 (20****)	16 (30****)
Wireless Expandability						
Sensors (micro poli, poli, nanus, unum-X, nebula, velum, matrix)	32	16	40	40	64	64
I/O module (auxi wls)	8	8	20	20	64	64
Sirens (imago wls)	3	3	3	3	5	5
Repeaters (duo)	2	2	2	2	2	2
Keypads (ergo wls)	4	2	3	3	4	4
Remote controls (opera)	16	16	64	64	64	64

* Supports only auxi, auxi-1, auxi-A and auxi-H - ** Does not support auxi-H - *** Second BUS receivers can be used disabling Transceiver on board
**** Extended number is available under license, contact our sales team for information