FEEL
SAFE

Alarm control panel integrated
with GSM/GPRS communicator:

CPXwired

CALLISTO plus SECURITY SOLUTION (hybrid)

EBS

CREATING A SENSE OF SECURITY
SINCE 1989

TWO TYPES
OF CONTROL PANELS

Wired CPXwired
Hybrid CALLISTO$_{16}$ & CALLISTO$_{32}$

CPXwired – wired alarm control panel is a device that meets the basic requirements for the protection of small and medium-sized objects. Simple functionality and service and quick installation are the main advantages of our control panel.

For more demanding users, we have created the CALLISTO, a hybrid alarm system, which reliably meets the needs of more complex objects. Our control panels support up to 3 wired keypads, so the alarm can be armed from 3 different locations, which is especially important:

- at service outlets with rear exit,
- in single family houses,
- in facilities where more than one door must be secured,
  e.g. balcony or garage doors.

Thanks to the wireless, dedicated detectors, it becomes unnecessary to lay meters of cables. Assembly is simple and non-invasive.

The **CALLISTO** system can be operated by up to 32 four–button remote controls that can be freely configured. Remote arming / disarming of the system with radio connection is confirmed in each case by acoustic signal.

FEATURES AND ADVANTAGES
CALLISTO hybrid control panel:

- **possibility to connect** up to **16/32** wireless detectors depending on control panel version;

- **code under duress** – additional protection against availability of the access code to the control panel by unauthorized persons. This feature triggers a silent alarm while providing the user maximum security;

- **STAY / AWAY function** allowing partial arming of the alarm while the user is at home;

- **function keys** – longer pressing one of the three buttons at the bottom of the keypad triggers the alarm type: PANIC/MEDICAL HELP / FIRE;

- **SMS** - both control panels provide the possibility to program SMS messages, so you can receive messages from the system to any type of phone;

- **integrated GPRS modem and wireless sensors receiver** reduces installation time, saves on additional modules during installation;

- **flexible selection between wireless and wired detectors** allows you to select the equipment individually which is suitable for the need of installation and customer;

- **remote access** to the configuration system and to monitor the control panel status - quick change of parameters ensures fast and efficient service;

- **free applications for end-user and an installer** - possibility of monitoring by the security agency and simultaneous use of the AVA mobile application to control the system.

APPLICATIONS for control panel management

AVA
EASY MANAGEMENT

Management of alarm control panels is enabled by an intuitive and free application for mobile phone - Alert View Application - AVA. It allows you to manage most of functions of the control panel, including:

- arming / disarming individual partitions,
- review of line assignment to the partition, line and power state,
- alarm alerts,
- review of event history,
- ability to monitor many objects from one application,
- smart home function.

AVA INSTALL
SIMPLE AND FAST INSTALLATION, INNOVATIVE SOLUTION

AVA Install is a modern application for even easier programming of all types of ALARM CONTROL PANELS manufactured by EBS:

- easy communication through BLUETOOTH (a MINI-PROG programmer is required),
- easy diagnostics and configuration of control panels,
- quickly adding of new sensors and wireless accessories through QR codes,
- option of testing of signal strength and range of sensors and wireless accessories,
- quick creation , export, import, and saving of configuration templates.

IN BRIEF

	CPXwired Wired	CALLISTO 16 Hybrid	CALLISTO 32 Hybrid
Transmission channels	GPRS	GPRS	GPRS
SMS to the monitoring station	YES	YES	YES
Wired zones	7	7	7 (doubled to 14 by TEOL)
Wireless zones	-	16	32
Partitions	2	2	2
Users	10	10	32
Supported wireless keypads	-	YES	YES
Supported wired keypads	3	3	3
Zintegrowany odbiornik pilotów radiowych	-	YES, max 9 pcs	YES, max 32 pcs
Sterowanie zdalne	YES, with SMS, GPRS or using AVA smartphone app	YES, with SMS, GPRS or using AVA smartphone app	YES, with SMS, GPRS or using AVA smartphone app
GSM module	2G Cinterion BGS2-W (GSM 850/900/1800/1900 MHz)	2G Gemalto BGS2 (GSM 850/900/1800/1900 MHz) 3GGemalto EHS-6 (GSM 850/900/1800/1900 MHz, UMTS 800/850/900/1900/2100 MHz)	2G Gemalto BGS2 (GSM 850/900/1800/1900 MHz) 3GGemalto EHS-6 (GSM 850/900/1800/1900 MHz, UMTS 800/850/900/1900/2100 MHz)

Our systems ASSURANCE OF

reliable data transmission (GPRS communicator integration), AES encryption.

quick and easy configuration

customised solution

WIRELESS SENSORS
INTEGRATED WITH CALLISTO SYSTEM

1 **MC-10**
Wireless magnetic contact
allows detection of opening doors/windows.

1 **MC-11**
Wireless magnetic contact detects opening of the doors/windows.
It is equipped with an additional input for external reed switch.
It is compatible with CALLISTO 16 (CPX220NWB) and
Callisto 32 (CPX230NWB). alarm control panel.

- Lithium 3V Battery: up to 36 months lifetime
- Low power consumption
- Supervisory signal every 15 min
- Opened cover tamper signal

- Battery status control (low-power signal)
- Max transmission distance: 300 m (open space)
- Size: detector 85x26x33 mm / magnet 64x13x13 mm

2 **PIR-10**
Wireless motion detector.

- Lithium 3V Battery: up to 36 months lifetime
- Dual passive infrared detection technology
- Temperature compensation
- Supervisory signal every 15 min.

- Low power consumption
- Battery status control (low-power signal)
- Max transmission distance: 300 m (open space)
- Size: 105x58x38 mm

2 · PIR-11 (PET)

PET immune wireless motion detector.

- Lithium 3V Battery: up to 36 months lifetime
- PET immunity up to: 25 kg
- Dual passive infrared detection technology
- Temperature compensation
- Supervisory signal every 15 min
- Low power consumption
- Battery status control (low-power signal)
- Max transmission distance: 300 m (open space)
- Size: 105x58x38 mm

3 · SD-20

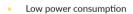Optical point smoke detector using scattered light.

- Adjustable sensitivity
- LED indicator (normal work, alarm, error state)
- Designed to meet the requirements of EN 54-7 and EN 54-25
- Battery status control (low-power signal)
- Lithium 3V Battery: up to 36 months lifetime
- Max transmission distance: 300 m (open space)
- Size: ø 140 x 70 mm

4 · FL-10

Wireless water flood detector for water leakage detection. Compatible with CALLISTO 16 (CPX220NWB) and Callisto 32 (CPX230NWB).

- Low power consumption
- Test signal every 15 minutes
- Opened cover tamper signal
- Battery status control (low-power signal)
- Battery: Lithium, CR123, battery lifetime up to 36 months
- Max transmission distance: 300 m (open space)
- Dimensions: 85x26x33 mm (detector); 55x25x10 mm (probe)

RC-10

Remote control with four programmable buttons

GS21, GS-22

is a detector for continuous monitoring of the presence of selected gases in accommodation and auxiliary areas, endangered with these gases, in accordance with the requirements of EN 50291-1:

GS-21 - carbon monoxide (CO) and methane (natural gas)
GS-22 - carbon monoxide (CO) and propane-butane (LPG)

Compatible with CALLISTO 16 (CPX220NWB) and Callisto 32 (CPX230NWB).

	Main features
Type of gas sensor	semiconductor (based on SnO2), exchangeable with sensory module
Disturbing factors	hydrogen, alcohol (high concentrations), other hydrocarbons, chlorine; significant oxygen deficit (<19% of volume); substantial , rapid increase of humidity
Working temperature	recommended: 0 ° C to + 40 ° C; acceptable periodically (<1h / 24h): -15 ° C to + 50 ° C
Relative humidity	recommended: from 30% to 90%
Alarm thresholds (applies for GS-21, GS-22)	50 ppm carbon monoxide - ALARM within 60 ÷ 90 minutes; 100 ppm CO - ALARM within 10 ÷ 40 minutes; 300 ppm CO - ALARM before 3 minutes; according to PN-EN 50291-1
Alarm threshold (applies to GS-21)	15% DGW methane (± 5% DGW) - ALARM within 1 min, according to PN-EN 50194-1.
Alarm threshold (applies to GS-22)	15% DGW propane-butane (± 5% DGW) - ALARM within 1 min. according to PN-EN 50194-1
Measuring cycle	GS-21, GS-22 every 25 sec. ; microprocessor control, memory of approx. 1000 events (power failures, alarm and emergency states, working time) - read by the manufacturer
Expected operation time	15 years from the date of manufacture (shown on the rating plate)
Optical signaling	lamp POWER / FAILURE - green (normal) or yellow
Sound signaling	(emergency) Sound signaling, ALARM light - red (alarm); detailed description of signaling Table 3; inner alarm buzzer, intensity 85dB / 1m, pulsating tone
Outputs	"SYRENA" - voltage UN = 9V, Imax = 50mA, "ALARM" - Umax = 24V AC; Imax = 100mA "PWRG" - Umax = 24V AC; Imax = 100mA
Dimensions, housing, weight	140 x 85 x 55 mm; ABS housing ; degree of protection IPX2D; 0,4 kg

AVAILABLE KEYPADS:

KP-16

Wired keypad that supports CPX200NB, CPX200NWB and CPX220NWB EBS control panels. Available in white and black color.

- Arming / disarming individual partitions or the entire system
- Arming in perimeter mode
- Service mode
- Signaling an alarm / fault
- Alarms PANIC/ / FIRE /HELP triggered by keypad
- Sound signaling for time of exit and alarm
- Dimensions: 99 x 82 x 19 mm

KP1W-9

Wireless, one-directional keypad that supports CPX220NWB.

- Compatible with the Callisto Plus wireless system (CPX220NWB)
- Frequency of operation - 433.92 MHz
- Radio communication range (LOS) - up to 500 meters
- Arming / disarming individual partitions or the entire system
- Arming in perimeter mode
- PANIC, FIRE, HELP alarms
- Low battery indication and signal transmission
- Dimensions: 125 x 102 x 33 mm

KP32

Wired keypad that supports CPX230NWB system.
Available in white (KP32-9) and black color (KP32-0).

- Arming / disarming individual partitions or entire system
- Arming in full, perimeter, night mode
- Quick arming without entry code
- Presentation and editing of parameters of 64 lines, users, detectors (by groups)
- Button labels to help you choose arm mode and partitions
- Pictograms (on the screen) to easily read the system state independently for two partitions
- Service mode
- Signaling an alarm / fault
- Alarms PANIC/ / FIRE /HELP triggered by keypad
- Sound signaling for time of exit and alarm
- Dimensions: 99 x 82 x 19 mm

KP2W-9

Wireless, one-directional keypad
that supports the CPX230NWB

- Compatible with the CPX230NWB wireless system
- Frequency of operation - 433.92 MHz
- Radio communication range (LOS) - up to 500 meters
- Arming / disarming individual partitions or entire system
- Arming in full, perimeter, night mode
- Quick arming without code entry
- Button labels to help you choose arm mode and partitions
- Alarms PANIC/ / FIRE /HELP triggered by keypad
- Low battery indication and signal transmission
- Dimensions: 125 x 102 x 33 mm

EBS CONTROL PANELS ARE AVAILABLE IN THE FOLLOWING SETS:

BASIC
Wired

Basic set with wired control panel to secure your home.

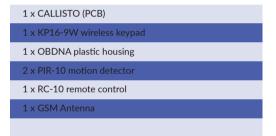| |
|---|
| 1 x CPX200NB (PCB) |
| 1 x KP-16 wired keypad |
| 1 x OBDNA plastic housing |
| 1 x GSM antenna |

STANDARD
Hybrid

Classic set that includes a wireless control panel, wireless detectors and a wired keypad.

1 x CALLISTO (PCB)
1 x KP-16 wired keypad
1 x OBDNA plastic housing
2 x PIR-10 motion detector
1 x MC-10 magnetic contact
2 x RC-10 remote control
1 x GSM antenna

MASTER
Hybrid

Full wireless set with white, wireless keypad.

1 x CALLISTO (PCB)
1 x KP16-9W wireless keypad
1 x OBDNA plastic housing
2 x PIR-10 motion detector
1 x RC-10 remote control
1 x GSM Antenna

✔ Control panels produced by EBS meet the requirements of **EN 50131, Grade 2.**

TECHNICAL PARAMETERS

Parameters		Podstawowe dane techniczne CPXwired oraz Callisto Plus
Transmisson channels		GPRS, SMS
Wired zones		7
Wired zones type	Callisto 16	NO / NC / EOL-NO / EOL-NC / DEOL-NO / DEOL-NC
	Callisto 32	NO / NC / EOL-NO / EOL-NC / DEOL-NO / DEOL-NC / TEOL
Response types of zones		• delay • 24h burglary • arming / disarming • perimeter • 24h tamper • perimeter exit • interior delay • 24h gas • 24h burglary silent • 24h water leakage • 24h fire • night (bypassed) (Callisto 32) • night with prealarm
Partitions	Callisto 16	2 + STAY/AWAY for each partition
	Callisto 32	2 + STAY/NIGHT/AWAY for each partition
Outputs		1 monitored alarm output, OC type, high-current (max. current 1.1A) 2 monitored alarm outputs, OC type, low-current (max. current 50mA)
Output functions		• alarm • alarm and chirp • chirp • standby indicator • power supply fault • communication loss • GSM jamming indicator

Power output +12V		1 signaling device output (max. current 350mA) 1 detectors output (max. current 350mA) 1 keypad output (max. current 100mA)
Wired keypads		max. 3
Users	Callisto 16	10 (possible remote administration of users) (admin-1 / installer-1 / user-8)
	Callisto 32	33 (possible remote administration of users) (admin-1 / installer-1 / user-31)
User SMS	Callisto 16	YES, 10 different phone numbers
	Callisto 32	YES, 32 different phone numbers
Events bufer		min. 500
Technical events stored in history		min. 2000
Timestamp event		YES
GPRS/SMS transmission security		AES encryption
Status LEDs (functions)		3 LEDs (GSM signal level, device state and faults)
Buttons (functions)		2 buttons (startup without mains power supply, restore default codes)
Configuration		Remote: GPRS, SMS, CSD Local: PC through RS232 (required cable: GD-PROG) USB / Bluetooth via MiniProgBT
Remote firmware update		YES
GSM module		2G: Gemalto BGS2 (GSM 850/900/1800/1900 MHz) 3G: Gemalto EHS-6 (GSM 850/900/1800/1900 MHz, UMTS 800/850/900/1900/2100 MHz)

Power supply parameters - PCB (without casing)	Voltage supply	$18V_{AC}$ (acceptable: $16\text{-}20V_{AC}$)
	Required transformer power	min. 20VA
	Power consumption (average / max)	$120mA/1100mA@18V_{AC}$ (avarage mesured: fully charged battery, established connection with server, connected keypad, no sensors connected)
	Average current consumption; lack of external supply (without keypad/ with keypad/ with 3 keypads):	60mA/85mA/135mA (fully charged battery, no sensors connected, established connection with server)
Power supply parameters - PCB in casing	Voltage supply	$230V_{AC}$ (acceptable: $190\text{-}250V_{AC}$)
	Power consumption (average / max)	$3W/20W@230V_{AC}$
Charging module functions	• protection against reverse battery connection • AC failure signalization • low battery/no battery signalization • protection against short circuit battery output • polymer fuse	
Backup battery connection	YES, lead-acid 12V	
Battery charging current	max. 350mA	
Charging voltage	13,8V	
Low battery voltage signaling threshold	$11V_{DC}$	
Cut-off battery voltage level	below 9V	
Dimension	PCB: 152 x 78 x 30mm PCB in plastic casing: 265 x 250 x 85mm	
CALLISTO wireless system additional functions		
Radio	YES, 433.92Mhz (encoded transmission with hopping code)	
Wiresless zones	CALLISTO 16 - 16 / CALLISTO 32 - 32	
Remote controls	CALLISTO 16 - 9 / CALLISTO 32 - 32	