

WIRELESS FIRE ALARM SYSTEMS

EN-54



Vionty Wireless Fire Alarm Systems with VLPWAN Technology can be used in all places such as museums, historical sites, historical churches and mosques, hotels, factories, which require a fire alarm system and where structural wiring is not possible or cable pollution is not desired.

Wireless system basically consists of four main components; Fire alarm control panel, Wireless Coordinator, Wireless Repeater, and wireless devices (Detector, Siren, Button, Input / Output Modules etc.) can be integrated into Vionty Addressable Fire systems and a completely wireless or hybrid structure can be created according to the needs of the project.

In addition, wireless products can work safely and highly compatible with all other brands in conventional systems. Thus, according to the need, you can provide an effective protection with either conventional or addressable wireless fire alarm system.

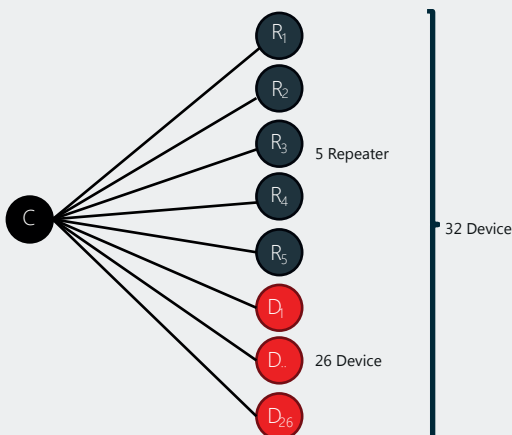
VLPWAN TECHNOLOGY

The main features of the VLPWAN wireless fire detection system are:

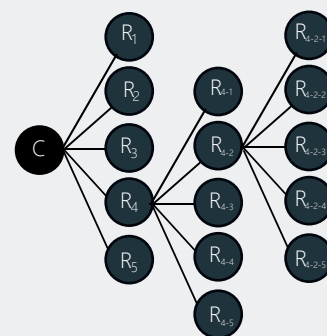
- The system can work with Vionty addressable fire alarm panels or with all other brands of conventional fire alarm panels.
- Supports up to 2500mt communication distance at open space
- Supports up to 31 device per coordinator (26 Device + 5 Repeater)
- Supports tamper warning for all devices
- Supports link test feature for all devices
- Supports firmware update feature for all devices

- Vionty Low Power Wide Area Network
- IEEE 802.15.4 Standard
- Low Power Consumption
- Bidirectional Communication
- AES-128 Encryption Algorithm
- Layer ACK Structure

VLPWAN NETWORK LIMITS



All devices can be connected to the last layer or distributed in all layers.



Up to 4 repeaters can be connected consecutively to a coordinator.

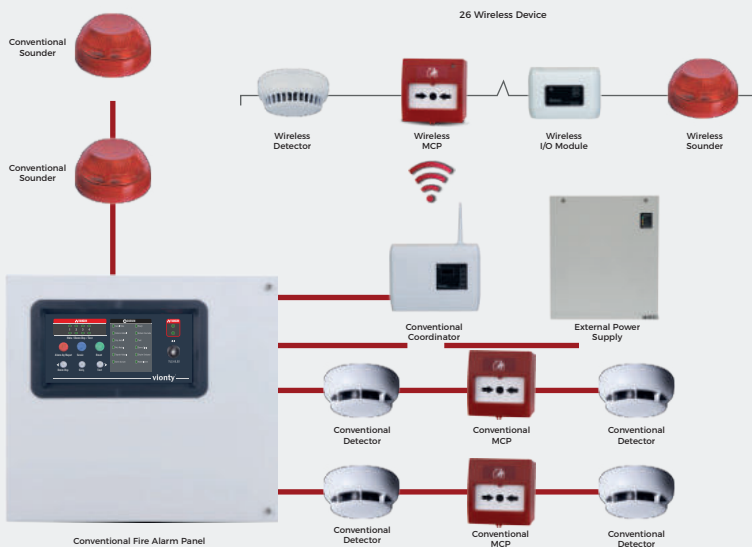


At least 5 of the devices to be connected to a coordinator are reserved only for repeaters and at most 26 are reserved for other devices.

Savings of up to 90% in Cable and Labor Costs!!



Wireless Addressable Fire Alarm System Diagram

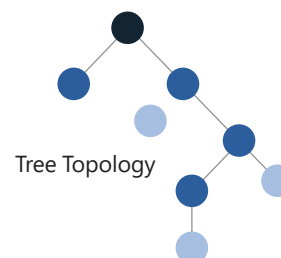
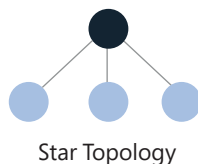


Wireless Conventional Fire Alarm System Diagram

VKM-2995 Wireless Addressable Coordinator can only be used with Vionty brand addressable fire panels, while the VKM-4995 Wireless Conventional Coordinator can be used with all brands and models of conventional fire panels. In this way, you can design a project completely wireless as in addressable or conventional, you can expand a previously installed system with wireless products, or you can create a hybrid structure by designing the project both wired and wireless from the beginning.

VLPWAN (Vionty Low Power Wide Area Network) is a wireless communication protocol in which devices with low power requirements communicate in a stable and reliable way using 2-way communication in a wide area. Thanks to its advanced addressing mechanism, it enables router devices to join the network easily. This allows the wireless communication area to be expanded easily.

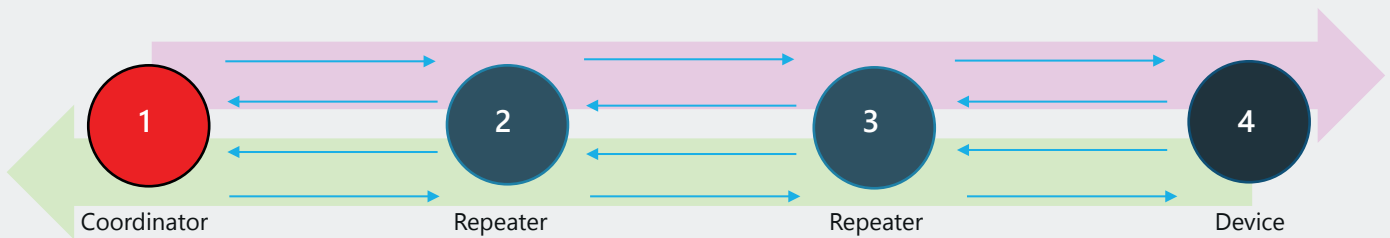
- Coordinator
- Router
- Devices



ACK MECHANISM

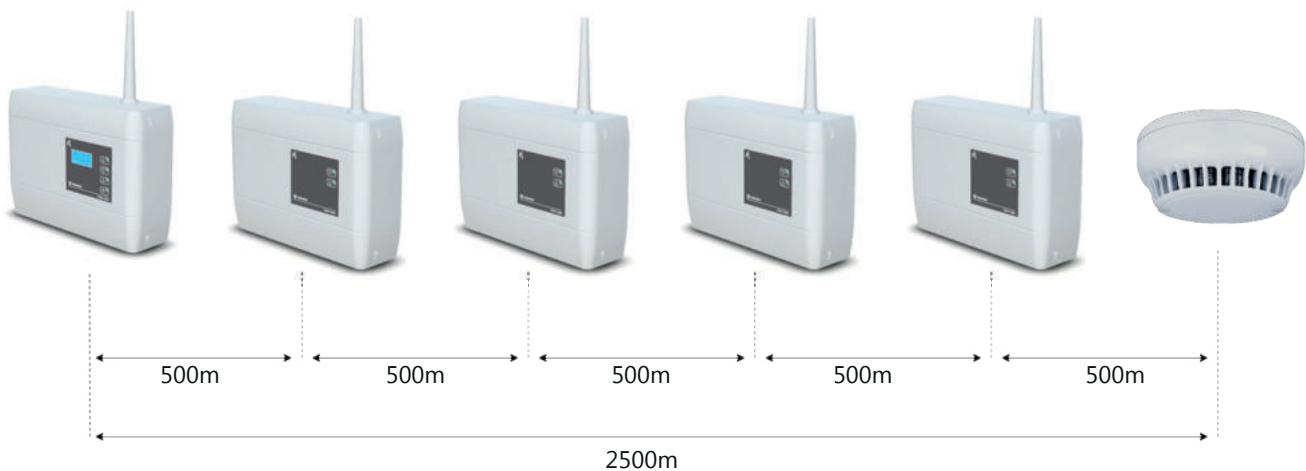
ACK (Acknowledgment) is a control message that checks whether the data is sent or not and starts the resend mechanism if it is not.

VLPWAN uses a 2-layer ACK structure to guarantee the transmission of data.



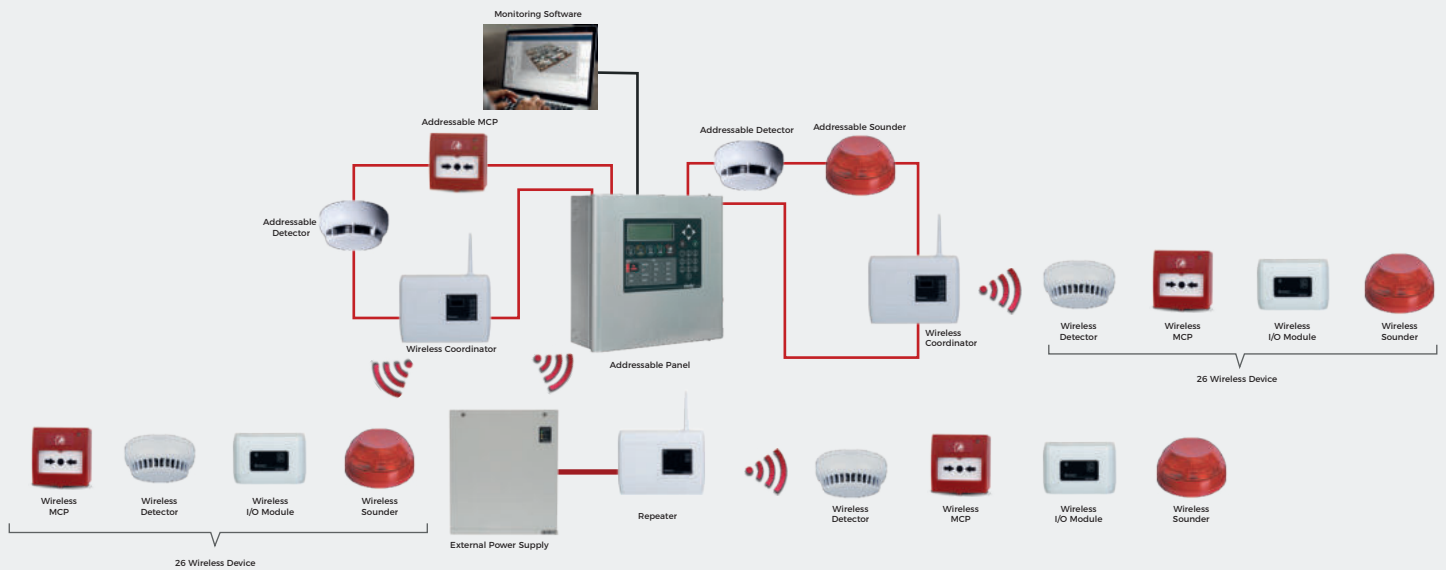
SIGNAL STRENGTH AND DISTANCE

- Up to 2500m communication distance at open space

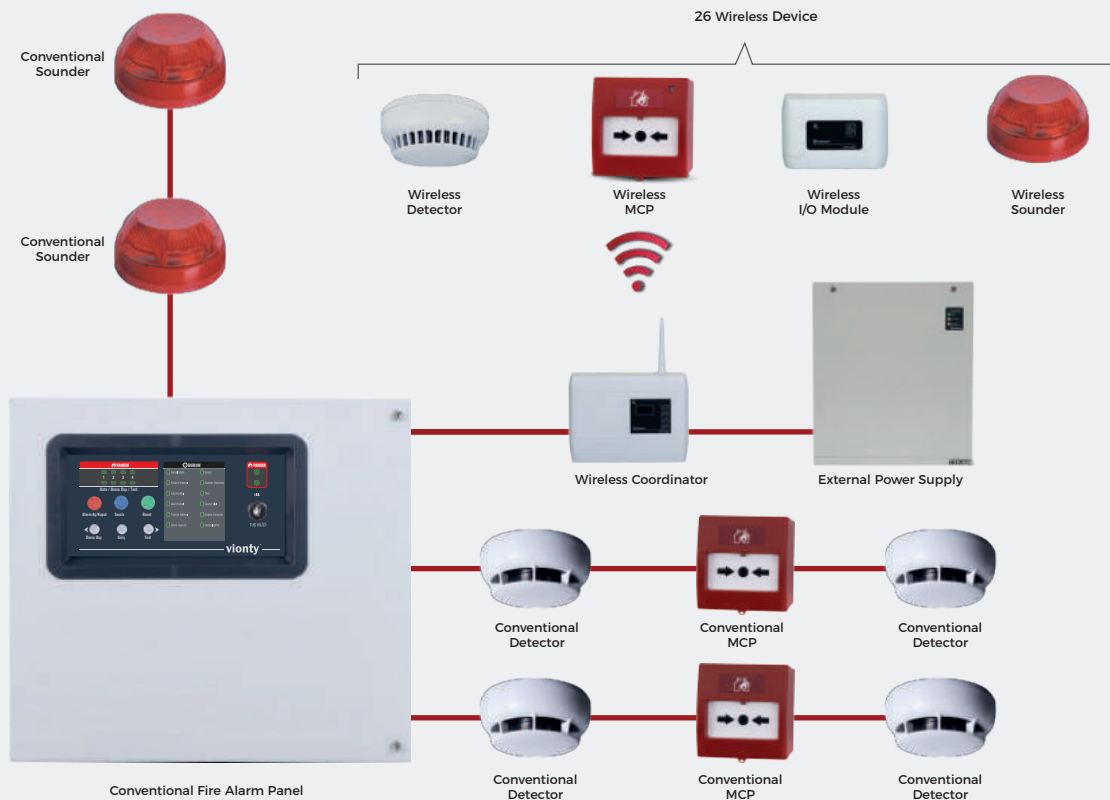


- Up to 2500m communication distance at open space
- Significant decreases in the signal power level may occur in places with high mobility such as parking lots, warehouses, factories, workshops, or in difficult structures such as multi-column and beam, thick walls, or in areas where metal and glass objects are predominant.
- It is not possible to talk about a certain communication distance in inside areas. .

Wireless Addressable Fire System Diagram



Wireless Conventional Fire System Diagram



VYP-2321 / VYP-2322 / VYP-2324

Intelligent Addressable Fire Alarm Panels

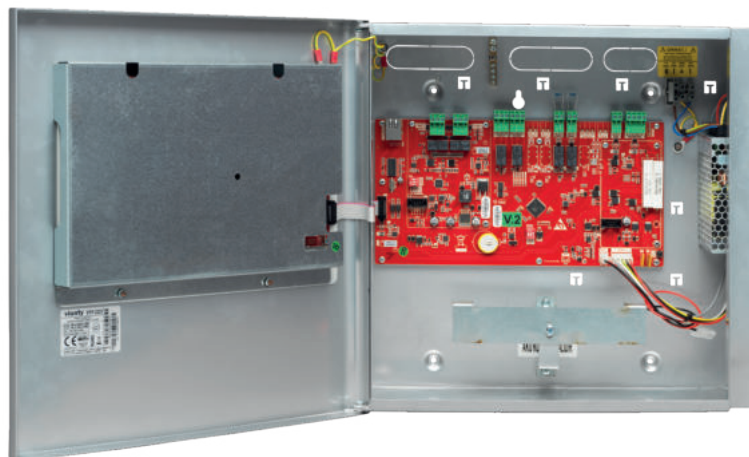
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Vionty wireless addressable devices are used with Vionty addressable control panels. Wireless addressable systems, designed according to EN54 standards, allow a completely wireless or hybrid system design with existing Vionty addressable control panels. The functions and settings of all wireless devices can be made on the addressable panel.

GENERAL FEATURES

- EN 54-2 and EN 54-4 Certified 1,2 and 4 Loop Options
- Wireless Device Support With VKM-2995 Wireless Addressable Coordinator
- 72 Programmable Zones
- Cable Distance Up To 2.5Km Per Loop
- 16 Panel Network Support
- Easy to read, 240*64 Wide LCD Graphic Display and User-friendly Interface
- Storing up to 12.000 Events History



Technical Specifications	VYP-2321 / 2322 / 2324		
Standard	EN54-2, EN54-4		
Display	240x64 Graphic Display		
Ethernet (TCP/IP)	Yes (Onboard)		
Loops	1	2	4
Number of Devices Supports Per Loop	240	240	127
Total Device Support	240	480	508
Number of Zones	72		
Network	16 Panel		
Power	230/110 VAC (+%10 / -%15)		
Battery	2x 12V, 7Ah / 2x 12V, 12Ah		
Number of Monitored Siren Outputs	2 Adet 500mA		
General Error Relay	1x NC/NO 30V 2A		
Fire Alarm Relay	1x NC/NO 30V 2A		
Operating Temperature	-10°C ~ 55°C		
Humidity	95% RH		
Protection Class	IP30		
Dimensions (mm)	385 x 380 x 130		
Body Material & Color	Metal, Metallic Grey		
Weight	6,5 kg (Without Battery)		

VKM-2995

Wireless Intelligent Addressable Coordinator

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Vionty VKM-2995 Addressable Coordinator is an interface that enables wireless devices such as detectors, MCPs, I/O Modules and sounders to be operated with Vionty addressable fire alarm panels. Vionty wireless fire alarm systems provide a flexible solution by completely wireless or hybrid structure as well as allowing existing wired structures to be expanded wirelessly especially where wiring infrastructure is not possible.

GENERAL FEATURES

- EN 54-18 and EN 54-25 Certified
- Fully Compatible with Vionty Addressable Fire Alarm Panels
- Fully Wireless or Hybrid System Design Options
- Easy and Fast Installation, Commissioning and Usage
- Supports 31 Wireless Devices per Coordinator (26 Device and 5 Repeater)

Technical Specifications	VKM-2995
Standard	EN54-18, EN54-25
Operating Frequency	868 mHz
Number of Channel	10
Number of Consecutive Repeater Connections	4
Total Number of Single Repeater Connections	5
Total Wireless Device Support	31 (26 Device and 5 Repeater)
Power	From Loop Line
Screen	OLED
Programming	From Control Panel and Onboard Control Buttons
Consumption	10mA
Built-in Isolator	Yes
Operating Temperature	-10°C ~ 55°C
Dimensions (mm)	150 x 110 x 42 mm, Antenna: 70mm
Weight	185gr
Humidity	95% RH
Protection Class	IP65



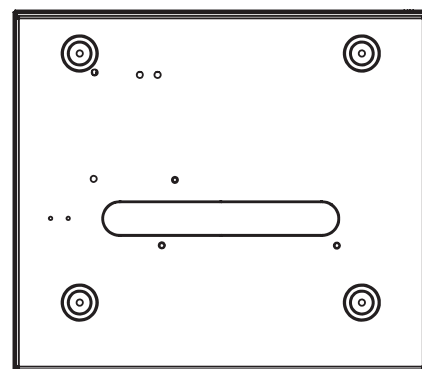
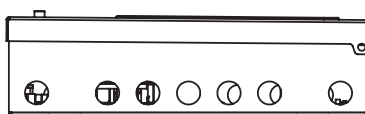
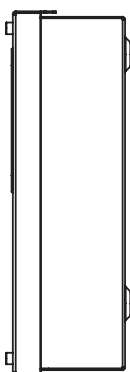
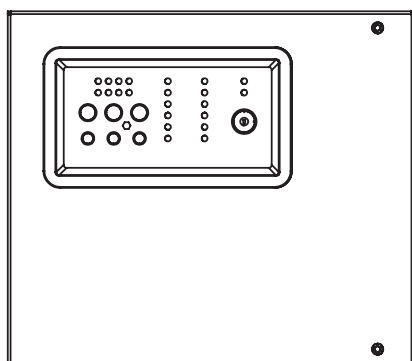


VYP-514 / VYP-518 has 4/8 zones and maximum 32 Conventional fire detectors and manual call points can be connected to each zone. It is the first choice of professionals with its elegant metal body design, easy installation and high performance. The panel meets all technical values required under European Standards.

GENERAL FEATURES

- EN 54-2 and EN 54-4 Certified 4/8 Zone Options
- Wireless Device Support With VKM-4995 Wireless Convantional Coordinator
- User-friendly, Easy to Manage Indicator Panel
- Separate Fire and Error LEDs for Each Zone
- Smart Battery Charging Feature Extending Battery Life
- Smart Start Feature that Prevents Direct Starting from the Battery
- Walk-through Test Function that can be Performed by a Single Person
- Disabling of Each Zone Individually

Technical Specifications	VYP-514 / VYP-518	
Standard	EN54-2, EN54-4	
Power	230/110 VAC (+%10 / -%15)	
Battery	2x 12V, 7Ah	
Zones	4	8
Maximum Numbers of Dedectors Per Zone	32	32
Number of Monitored Siren Outputs	2 Adet 500mA	
General Error Relay	1x NC/NO 30V 2A	
Fire Alarm Relay	1x NC/NO 30V 2A	
Operating Temperature	-10°C ~ 55°C	
Humidity	95% RH	
Protection Class	IP30	
Dimensions (mm)	340 x 310 x 100	
Body Material & Color	Metal, Light Grey	
Weight	4,4 kg (Without Battery)	





Vionty VKM-4995 Conventional Coordinator is an interface device that enables wireless devices to be operated with conventional fire alarm panels. The Wireless Conventional Coordinator module, which can work in full compatibility with all brand and model conventional fire panels by using the desired end of line resistor, processes the signals it receives from all wireless devices and enables the warning and notification functions in the control panel.

GENERAL FEATURES

- EN 54-18 and EN 54-25 Certified
- Fully Compatible with All Brand Conventional Panels
- Fully Wireless or Hybrid System design Options
- Easy and Fast Installation, Commissioning and Usage
- Support for 31 Wireless Devices per Coordinator (26 Device and 5 Repeater)
- Approx. 500mt Wireless Coverage (Open Area)

Technical Specifications	VKM-1995
Standard	EN54-18, EN54-25
Operating Frequency	868 mHz
Number of Channel	10
Number of Consecutive Repeater Connections	4
Total Number of Single Repeater Connections	5
Total Wireless Device Support	31 (26 Device and 5 Repeater)
Power	18 - 35VDC (External)
Screen	OLED
Zone Resistor	Determined According to the Conventional Panel
Sounder Monitoring Input	1
Programming	Onboard Control Buttons
Consumption	10mA
Operating Temperature	-10°C ~ 55°C
Dimensions (mm)	150 x 110 x 42 mm Antenna: 70mm
Weight	185gr
Humidity	95% RH
Protection Class	IP65





VKM-2996 Wireless Repeater allows the wireless network area to be expanded by connecting to the coordinator or another repeater. It is mainly used to increase the communication distance between the wireless coordinator and wireless devices.

It is suitable for use with both VKM-2995 Wireless Addressable Coordinator and the VKM-4995 Wireless Conventional Coordinator.

GENERAL FEATURES

- EN 54-18 and EN 54-25 Certified
- Fully Compatible with VKM-2995 and VKM-4995 Coordinators
- External Power 18-35 VDC
- Easy and Fast Installation, Commissioning and Usage
- Approx. 500mt Wireless Coverage (Open Area)

Technical Specifications	VKM-2996
Standard	EN54-18, EN54-25
Operating Frequency	868 mHz
RF Power	14 dBm (25 mW)
Number of Channel	10
Number of Consecutive Router Connections	4
Total Number of Single Router Connections	5
Total Wireless Device Support	31 (26 Device and 5 Router)
Coverage	500mt (Açık Alan)
Programming	Onboard Control Buttons
Consumption	10mA
Operating Temperature	-10°C ~ 55°C
Dimensions (mm)	150 x 110 x 42 mm Antenna: 70mm
Weight	185gr
Humidity	95% RH
Protection Class	IP65



VKD-2960

Wireless Multi Detector (Smoke and Heat)

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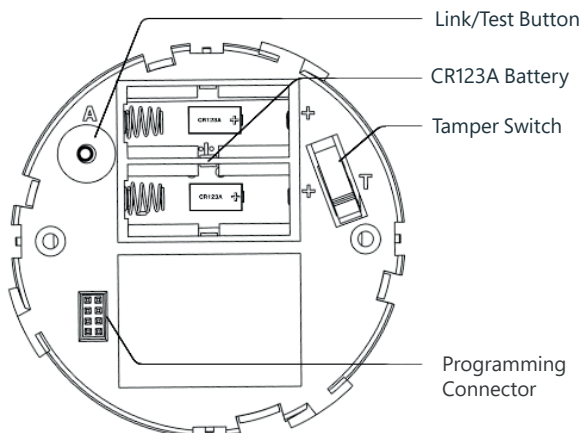
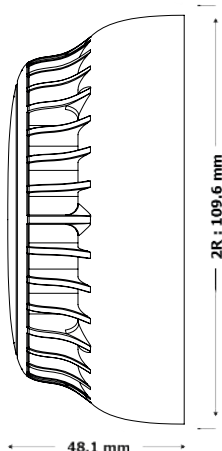
VKD-2960 Wireless Multi Detector offers excellent wireless solutions with wide coverage and long-term battery life, especially in places where wiring is costly or impossible.

The wireless multi detector offers different types of detection options in a single detector. In this way, the confusion caused using detectors with different product codes in projects is prevented, and different types of detection needs are provided with software settings to be made in a single detector.

GENERAL FEATURES

- EN54-5, EN54-7 and EN 54-25 Certified
- Approx. 500mt Wireless Coverage (Open Area)
- 8 Years Battery Lifetime with Two CR123A Battery
- Different Type of Detection in a Single Detector;
 - o Only Optical Smoke
 - o Only Fixed Heat
 - o Only Rate of Rise Heat
 - o Smoke and Fixed Heat
 - o Smoke or Fixed Heat
 - o Smoke and Rate of Rise Heat
 - o Smoke or Rate of Rise Heat
- Special software algorithms to eliminate false alarms
- Easy to Clean Smoke Chamber

Technical Specifications	VKD-2960
Standard	EN54-5, EN54-7, and EN54-25
Operating Frequency	868 mHz
RF Power	14dBm (25mW)
Number of Channel	10
Coverage	500mt (Open Space)
Battery	8 Years With 2X CR123A Battery
Consumption	25uA
Detection Types	Smoke Fixed Heat Rate of Rise Heat Smoke and Fixed Heat Smoke or Fixed Heat Smoke and Rate of Rise Heat Smoke and Rate of Rise Heat Smoke or Rate of Rise Heat
Smoke Detection Level	H:0,12 – m:0,15 – I:0,18 dB/m
Heat Detection	A2S, A2R
Operating Temperature	-10°C ~ 70°C
Dimensions (mm)	Ø109,6- h48,1
Weight (With and Without Base)	183 gr / 125 gr
Humidity	95% RH
Protection Class	IP30





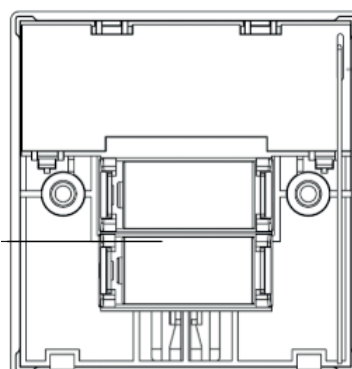
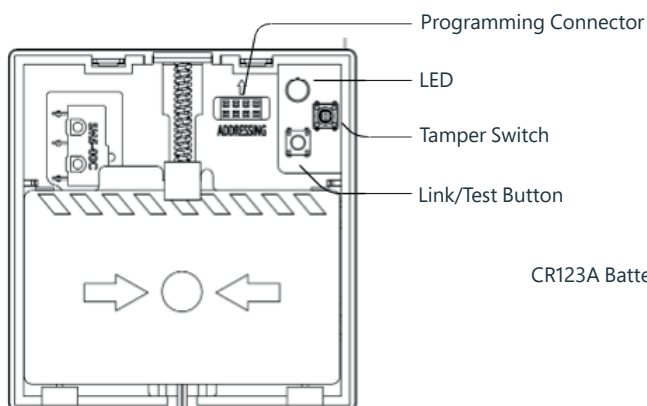
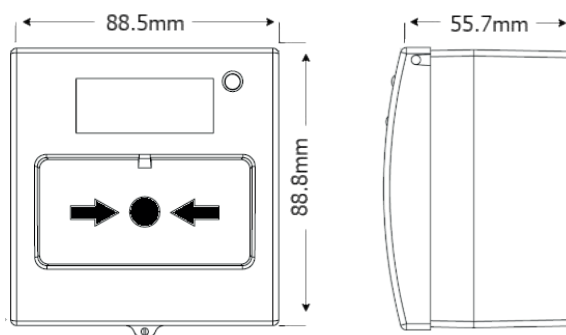
VKB-2976 is a wireless manual call point used to create manual warning in case of fire. It communicates completely wirelessly with the control panel.

VKB-2976 can operate 4 years with single battery or 8 years with two battery. It supports resettable type of operation and additional protection cover can be implemented to avoid situations that may cause false alarms.

GENERAL FEATURES

- EN54-11 and EN 54-25 Certified
- Approx. 500mt Wireless Coverage (Open Area)
- 8 Years Battery Lifetime with Two CR123A Battery
- Resettable Type of Operation
- Optional Protection Cover
- Flush or Surface Mounting Option

Technical Specifications	VKB-2976
Standard	EN54-11 and EN54-25
Operating Frequency	868mHz
RF Power	14dBm (25mW)
Number of Channel	10
Coverage	500mt (Open Space)
Battery	8 Years With 2X CR123A Battery
Average Consumption	25µA
Operation Type	Resettable
Operating Temperature	-10°C ~ 55°C
Dimensions (mm)	86x55x88 mm
Humidity	95% RH
Protection Class	IP30





VKM-2997 Wireless input / output module is used to connect 3rd party wired products to the control panel wirelessly or to control a 3rd party device wirelessly. Input terminal is monitored for connection errors. Input and output can be programmed to be used in any scenario through the panel.

GENERAL FEATURES

- EN 54-18 and EN 54-25 Certified
- Approx. 500mt Wireless Coverage (Open Area)
- 8 Years Battery Lifetime with Two CR123A Battery



Technical Specifications	VKM-2997
Standard	EN54-18, EN54-25
Operating Frequency	868 mHz
RF Power	14dBm (25mW)
Number of Channel	10
Coverage	500mt (Open Space)
Battery	8 Years With 2X CR123A Battery
Operation	1x Monitored Input 1x Output
Operating Temperature	-10°C ~ 55°C
Consumption	15uA (@3V)
Dimensions (mm)	100x66x33.5 mm
Humidity	95% RH
Protection Class	IP30



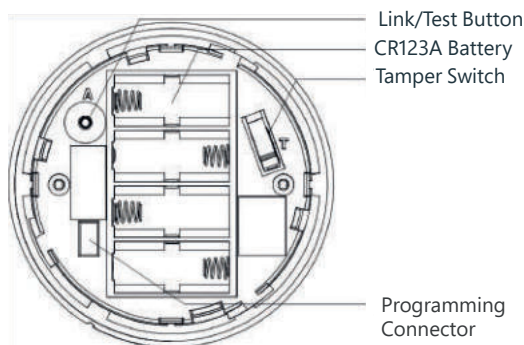


VKS-2492 works as sounder, flasher or both options at the same time according to project needs. It operates with 4pcs CR123A battery and communicates completely wirelessly with the control panel.

It has two different color options, white and red. Supports 3 different sound level along with 3 different flasher mode.

GENERAL FEATURES

- EN54-3, EN54-23 and EN 54-25 Certified
- Approx. 500mt Wireless Coverage (Open Area)
- 6 Years Battery Lifetime with 4X CR123A Battery
- Only Sounder, Only Flasher or Both Options can be Operated
- 3 Different Sound Level
- 3 Different Flasher Mode (Slow, Normal, Fast)



Technical Specifications	VKS-2492
Standard	EN54-3, EN54-23, and EN54-25
Operating Frequency	868Mhz
RF Power	14dBm (25mW)
Number of Channel	10
Coverage	500mt (Open Space)
Battery	6 Years With 4X CR123A Battery
Average Consumption	20µA (@12V)
Sound Level	88,4dB / 90,3dB / 95dB ±2 (@12VDC, 1mt.)
Flasher Coverage	W-2,4-4
Sounder Mode	3 Modes (Low-Mid-High)
Sounder Tone Options	42 Different Tone
Flasher Mode	3 Modes (Slow-Normal-Fast)
Operating Temperature	-10°C ~ 55°C
Color and Body Material	RED / White - UL94 non-flammability Polycarbonate
Dimensions (mm)	Ø:110mm, h:55mm (Includes Base)
Wight	190gr. (Without Battery)
Humidity	95% RH
Protection Class	IP21C

VGK-9355

External Power Supply 24VDC 5Ah

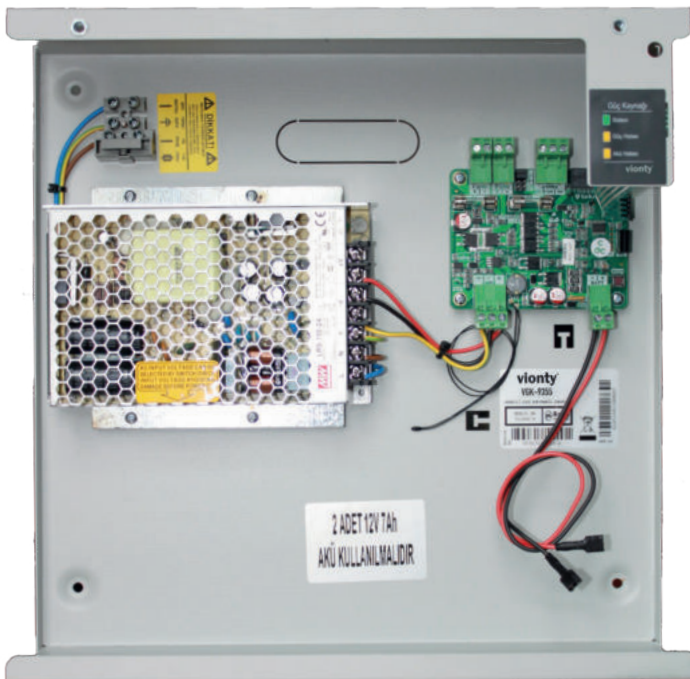
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VGK-9355 is designed to use in systems where required external power supply by providing 24VDC 5Ah uninterrupted power with an intelligent battery charger unit and complies with EN54-4. Both input and outputs of devices are protected against short circuit and overload. The device allows to use 7Ah or 12Ah battery options.



GENERAL FEATURES

- EN 54-4 Certified
- Selectable Single or Dual Output
- Supports 7Ah or 12Ah Backup Battery
- Dry Contact Relay Output for Error
- Led Indicators for Fault
- Intelligent Battery Charging with Temperature Compensation
- Wide Input Voltage Range, 110 to 240VAC
- Protection Against Short Circuit and Overload Conditions
- Fully Enclosed and Robust Metallic Case



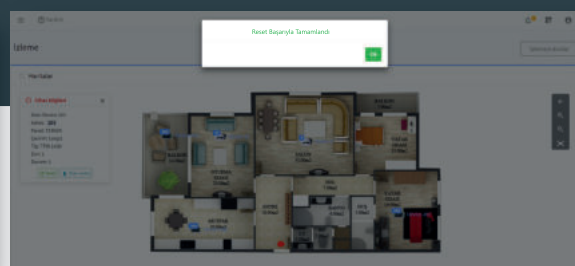
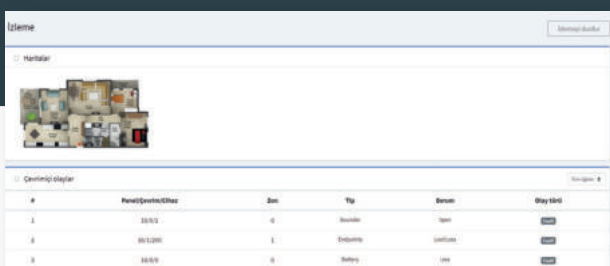
Technical Specifications	VGK-9355
Standard	EN54-4
Smart Charge	Yes
Error Relay	Yes
Operating Voltage	110 / 240VAC
Operating Frequency	50 / 60 Hz
Output Voltage	20~24Vdc \pm 2%
Maximum Output Current	5Ah
Outputs (S1 Closed, S2 Open) (S1 Open, S2 Closed)	Output-1: 5,0Ah Output-2: 0,0Ah Output-1: 2,5Ah Output-2: 2,5Ah
Backup Battery	2X 12V, 7Ah
Charging Voltage	27,6V@ 20°C
Discharge cut-off	< 20V
Dimensions (mm)	310 x 102 x 300 mm
Body material and color	Metal RAL7305 Texture
Weight	3,25Kg (Without Battery)
Operating Temperature	-10°C ~ 55°C
Humidity	95% RH
Protection Class	IP30



VYY-1100 is a web based graphical monitoring software for Vionty addressable fire alarm system. It supports adding multiple maps for projects and providing adding all devices on maps according to project needs.

It has easy to use interface and supports pop-up visual and sound warnings during alarms and warnings.
It also supports to send commands to control panels such as reset, silence, or evacuate.

- Supports up to 16 Control Panel at the same time
- Graphic interface
- POP-UP alarm information
- Supports API Integration for 3rd party software
- Transition between maps in case of multiple fire alarms and graphical viewing of event location
- Remote command sending for silence, evacuation, reset
- Multiple map support (.png, .bmp and .jpeg)
- Display/save unlimited number of event logs by filtering (pdf)
- Multi-language support



TO MAKE LIFE SAFER...

As Bilgi Elektronik, we use our own unique technologies developed by our large R&D staff in all products we manufacture. We have been trying to make life easier and safer for both consumers and our business partners with the high quality products we have developed and produced for 25 years.



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