



BUILT - IN
SIREN



STANDARD
AA - BATTERIES



PET FRIENDLY



TWO-WAY
COMMUNICATION



EASY DIY



WIRELESS



ANTI-THEFT



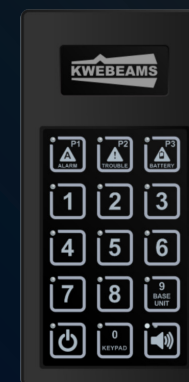
ANTI-TAMPER

OUTDOOR EARLY WARNING SYSTEM

KWÊBEAMS PRODUCT BROCHURE

Your set of eyes when your not looking

www.kwebeams.co.za



KWÊBEAMS

TABLE OF CONTENT

About Kwêbeams 1

Security Products Kwêbeams 1

Products

Wireless Passive Infrared Beam 2

KwêHub WiFi and WiFi/LTE Unit 4

KwêBeams Mobile App 5

Wireless Control Unit 6

Wireless Range Extender 7

Wireless Universal Sensor 8

Wireless Transmitter 9

Interface Module 10

Technical Specifications 11

Technical Specifications Continued 12



MAKE YOUR
HOME SMARTER

ABOUT KWÊBEAMS

The product name “Kwêbeams” has got its origin from the warning sound of the Kwêvoël (a bird in nature).

Our mission is to create effective and easy to use wireless outdoor alarm systems, with high quality at a reasonable price. The product is proudly South African and has been developed to withstand challenging South African weather conditions.

We believe each household should have an Early Warning System, whereby intruders can be stopped, before they make an entrance.



BUILT-IN SIRENS IN
ALL BEAMS



ANTI-TAMPER
FEATURES



ANTI-THEFT FEATURE/
ORIENTATION DETECTION



EASY DO IT
YOURSELF

KWÊBEAMS SECURITY PRODUCTS

KwêBeams is a standalone wireless outdoor early warning system, completely independent of any existing security system. It has been designed to complement the current security systems in place, such as indoor alarm systems, perimeter protection (electric fencing, burglar bars) or surveillance protection.

The Kwêbeam outdoor alarm system is fully functional with one beam and a KwêHub, however additional beams, universal sensors, keypads, transmitters, range extenders and interface modules can be added to the same alarm system.

The robust 2-way radio technology features built-in repeater functionality in all devices and allows you to monitor the operation between detectors at distances up to 1000m, provided there are no obstacles.

WIRELESS OUTDOOR BEAMS EARLY WARNING SYSTEM



TWO-WAY WIRELESS
COMMUNICATION



STANDARD
AA BATTERIES



PET
FRIENDLY

PRODUCTS

WIRELESS PASSIVE INFRARED BEAM



All wireless outdoor beams feature a unique built-in siren that provides an unexpected element of surprise next to an intruder. The built-in siren can be muted or sound for a delay defined by the user.

MAIN FEATURES:	KB-S	KB-AM
Dual PIR beams for minimal false alarms.	✓	✓
Built-in 95-decibel programmable siren. Panic sounds all sirens simultaneously.	✓	✓
Built-in 'Repeater' functionality for extended wireless range.	✓	✓
Two-way wireless communication – 868 MHz frequency.	✓	✓
8 adjustable sensitivity settings.	✓	✓
Up to 18m detection range, 90 degrees wide.	✓	✓
The Beam operates up to 3 years from 3 standard AA alkaline batteries.	✓	✓
Theft protection: Any change in the orientation will trigger the built-in Siren, whether the system is Armed or Disarmed.	✓	✓
Active Infrared detects masking attempts in the near-field vision. A masking attempt will send a notification to the user and trigger the built-in Siren.	✗	✓



PRODUCTS

WIRELESS PASSIVE INFRARED BEAM



Built - In Repeaters



95 Decibel Siren



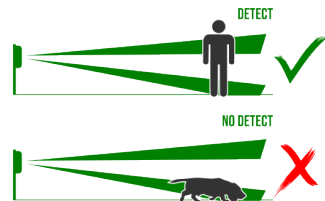
Tilt Detection



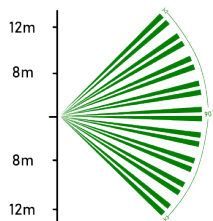
Anti - Masking



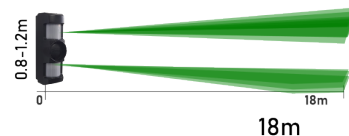
2 Way Wireless Communication



Pet Friendly



Top View



Side View

ABOUT THE WIRELESS PASSIVE INFRARED BEAM

The Kwêbeam system has been designed to be effective & easy to install. One outdoor sensor with a KwêHub completes a fully operational outdoor alarm system. Additional sensors, keypads, universal sensors, transmitters and interface modules can be added as required. A fully programmable built-in siren provides an unexpected element of surprise next to an intruder. No additional siren installation is required.

The outdoor motion sensor features dual PIR detection to ignore pets & detect people. Both top & bottom detectors must sense a moving heat source for a valid alarm signal. False alarms are further reduced with software algorithms to differentiate true detection from environmental noise.

The system is completely wireless and powered by standard AA alkaline cells. All wireless beams can transmit & receive signals for reliable 2-way communication. Built-in repeater functionality strengthens wireless performance and overcomes wireless range issues.

A Tilt sensor reports orientation changes while the system is armed or disarmed. To prevent theft & vandalism the built-in siren will sound when the sensor is forcibly removed.

The Anti-Masking version includes Active Infrared sensors that detects damaged lenses or unwanted objects in front of the lens. This prevents masking attempts while the system is armed or disarmed.

PRODUCTS

KWÊHUB WIFI AND WIFI/LTE UNIT



The KwêHub WiFi Unit connects to your WiFi Router and or a Cellular Provider's Cellphone tower to give you control over the system via the KwêBeams Mobile App.

MAIN FEATURES:

Full Kwêbeam system control via the KwêBeams Mobile App

Arm, Disarm and send Panic signal using the buttons on the KwêHub

Built-in awareness buzzer will sound unique tones for individual zones

Support two arming modes, each with individual bypass and siren settings

Panic button activates all built-in sirens that gives an unexpected element of surprise next to an intruder

Instantly adjust detector sensitivity levels, siren settings or any other setting on all connected devices

Built-in lithium battery:

- 16 hours backup in normal mode (WiFi and LTE is connected)
- 24 hours backup in low power mode (LTE connected)
- Up to 3 months operation directly from the KwêHub (WiFi and LTE not connected)

Robust 2-way radio protocol over 868Mhz frequency.

Small size with low power consumption

Ready to operate out of the box

ABOUT THE KWÊHUB WiFi UNIT

The KwêHub controls and monitors all connected Kwêbeam devices using a robust 2-way radio protocol over the 868Mhz frequency spectrum. The 2-way radio technology features built-in repeater functionality in all devices and allows you to monitor the operation between detectors at distances up to 1000m, provided there are no obstacles.

It immediately sends an alarm signal to all users registered on the system. The KwêHub supports push notifications and optional SMS messages to send alarm & system information to users.

The main communication channel uses WiFi with 4G/LTE as backup.

The KwêHub receives new features several times a year with over-the-air updates. The update process is automatic and takes minutes when the security system is disarmed. The hardware configuration will allow the KwêHub to evolve and remain relevant for years to come.



Red: No Connection to WiFi, LTE nor Cloud



Blue: Connected to WiFi, LTE and Cloud



Magenta: Connected to WiFi, Cloud but Not LTE



Turquoise: Connected to Cloud and LTE



Green: Connected to WiFi but Not to Cloud and Not to LTE



Yellow: Not Connected to WiFi nor to Cloud, but Connected to LTE

PRODUCTS

KWÊBEAMS MOBILE APP



The mobile App gives full control over the KwêBeams Early Warning System, from anywhere in the World. Control your Home, Office, Holiday home and all other Kwêbeam systems from one single App interface.

MAIN FEATURES:

- Gives full control over the KwêBeams Early Warning System, from anywhere in the World
- Instantly update sensitivity settings on any sensor
- Two arming modes ensures customizable settings in different arm states
- Push notifications indicating Alarms, Tamperers, Low Batteries, Power Failures and much more
- Optional SMS notifications
- Auto Arm and Auto Disarm Timer
- Easily bypass individual zones
- Provides a log of up to 100 entries

ABOUT THE KWÊBEAMS MOBILE APP

Detailed graph for each detection showing the detection quality between the Top and the Bottom detector of the beam. Detection quality thresholds can be set to ignore unwanted detections in noisy environments.

Easily update siren behaviour to mute or sound for a defined delay. The siren settings can be adjusted separately for two Arming modes.

A user defined “respond delay” can be activated where the user must respond on the App within the defined time to acknowledge the Alarm event. If the user was unable to respond due to network or mobile phone failure, all built-in sirens will sound to chase away trespassers.



PRODUCTS

WIRELESS CONTROL UNIT



The Kwêbeam outdoor alarm system is fully functional with only one Beam and one Keypad, however multiple Keypads & Beams can be added to the same alarm system.

MAIN FEATURES:

- Visual & audible alarm indication
- Monitors Alarm, Low battery & Troubled Zones
- Backlight for visibility in low light conditions
- Arm / Disarm all Kwêbeam sensors
- Temporarily bypass zones
- 868Mhz Two-Way wireless communication
- Multiple keypads supported on the same system
- Panic sounds all beam sirens at the same time
- Operates from standard AA alkaline batteries
- 1 Year battery life

ABOUT THE WIRELESS CONTROL UNIT / KEYPAD

The Keypad is used to control the Kwêbeam system. This includes arming and disarming all beams, bypass individual Zones & making programming changes to any Kwêbeam device. The panic button can be used to sound all Beam sirens at the same time.

The Keypad monitors 8 individual zones with the option to assign more than one sensor to the same Zone number. A total of 32 devices can be monitored when 4 sensors share a Zone number. It receives Alarm, Tamper and Low battery signals to give a visual & audible overview of the complete system.

The Wireless Keypad is completely mobile and operates from 3 standard AA alkaline batteries. Multiple keypads are supported on the same system.



PRODUCTS

WIRELESS RANGE EXTENDER



The wireless range extender is an optional extra. It allows Multi-hop repeating between devices for long range applications.

MAIN FEATURES:

868Mhz Two-Way wireless communication

Built-in tilt and shock sensor

Two inputs can be connected to third-party detectors to monitor alarm and tamper signals

Auxiliary 3V output. Adjustable to always supply power or only when the system is armed

Powered from 2 standard AA alkaline batteries

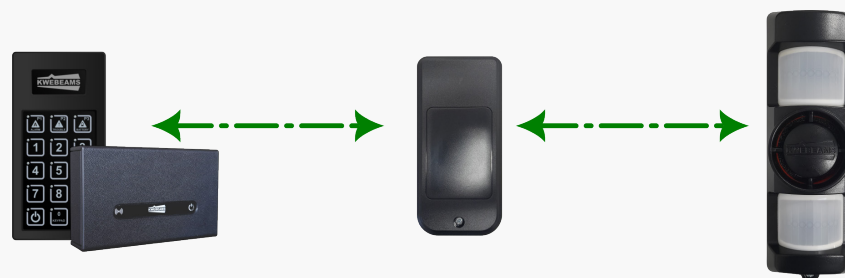
3 Year battery life

ABOUT THE WIRELESS RANGE EXTENDER

In a perfect environment, distances up to 1000m is possible between devices, without any repeaters (Line Of Sight between devices). The range is highly depended on the environment & will reduce dramatically with walls & structures in close vicinity. For this reason, all system devices feature Built-In repeater functionality to overcome range issues in highly dense building environments.

The wireless range extender is an optional extra and can be added if there are range issues. It allows for Daisy Chain Repeating between devices and will always be in repeater mode. Ideal for long range applications.

It includes an accelerometer sensor for vibration and orientation detection with 3 programmable sensitivity settings. When the accelerometer is triggered, the event can be programmed as an alarm or trouble notification.



PRODUCTS

WIRELESS UNIVERSAL SENSOR



The universal Sensor functions as a shock and tilt detector with two inputs to monitor external wired detectors with a NC/NO contact type.

MAIN FEATURES:

Repeater functionality for long range applications

Built-in tilt and shock sensor

Two inputs can be connected to third-party detectors to monitor alarm and tamper signals

Auxiliary 3V output. Adjustable to always supply power or only when the system is armed

Powered from 2 standard AA alkaline batteries

3 Year battery life

ABOUT THE WIRELESS UNIVERSAL SENSOR

The Kwêbeam Universal sensor is equipped with a shock and tilt sensor. The sensor is activated when the angle of inclination changes, or when struck. The sensitivity level of the shock detector is adjustable.

Typical applications are to monitor theft and vandalism on gate motors, solar panels, borehole pumps and other fixed assets. Opening and closing of garage doors can be monitored with the tilt detector when the sensor is mounted on the inside of the garage door.

The Universal sensor is also equipped with two inputs to connect external wired detectors with a NC/NO contact type. This allows to monitor open and closing events on hinged and sliding gates.



PRODUCTS

WIRELESS TRANSMITTER



The Wireless Transmitter functions as a shock and tilt detector with two inputs to monitor external wired detectors with a NC/NO contact type.

MAIN FEATURES:

Repeater functionality for long range applications

Built-in tilt and shock sensor

Two inputs can be connected to third-party detectors to monitor alarm and tamper signals

Auxiliary 3V output. Adjustable to always supply power or only when the system is armed

Powered from 2 standard AA alkaline batteries

3 Year battery life

ABOUT THE WIRELESS TRANSMITTER

The module receives information about alarms and events via a wired connection. Having received an event, it transmits it to the KwêHub via the 2-way 868Mhz radio protocol, and the Kwêhub notifies the system users.

The Transmitter works with any detector or device with NC/NO contact type. The module supports shock and tilt detection with alarm and trouble inputs. The type of event determines the alarm notification received by the user.

The 2-way radio technology features built-in repeater functionality to illuminate any range issues with third-party detectors.



PRODUCTS

INTERFACE MODULE



The Interface unit can be used to link or connect external systems or devices to the Kwêbeam system.

MAIN FEATURES:

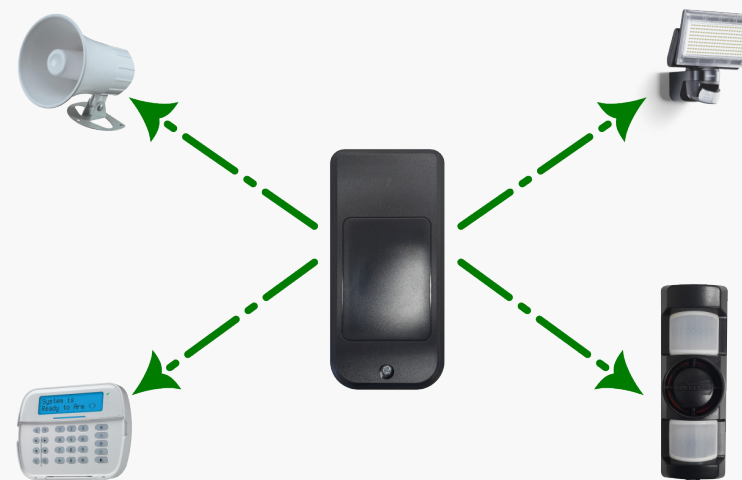
- Repeater functionality for long range applications
- Monitor external devices for Alarm, Trouble and Panic signals
- Connect remote receivers to Arm/Disarm the Kwêbeam system
- Relay output to drive external Sirens or LED spot lights
- 8 Programmable event outputs for Alarm, Trouble, Panic and Arm state

ABOUT THE INTERFACE MODULE

The Interface unit features a multipurpose optical input for Alarm, Tamper or Panic monitoring. This input is useful to monitor electric fence energizers, gate motors & alarm systems. The input can also be programmed to have a Panic function. This will sound all beam sirens simultaneously when the input is triggered.

The unit also features a second digital input to Arm & Disarm the Kwêbeam system. A remote receiver or existing alarm system can be connected to this input to Arm & Disarm the Kwêbeam system. The relay output with programmable delay can activate any connected device (spotlights, sirens, armed response etc.) when a valid alarm signal is received.

The 8 open drain outputs can be used to report Alarm events for 8 individual zones. When the wireless sensor sends an alarm signal, the Relay module processes the signal and activates the wire output corresponding to the zone number of the sensor.



OPTIONAL TECHNICAL SPECIFICATIONS

ANGLE MOUNTING BRACKET



With the unique angle mount bracket the beams can be mounted to face 5 different directions:

- 1 - 45° facing right
- 2 - 22.5° facing right
- 3 - 0° without bracket
- 4 - 22.5° facing left
- 5 - 45° facing left

1

For a 45° angle, mount the side marked 45° against the wall.

2

For a 22.5° angle, mount the side marked 22.5° against the wall.

3

No Bracket

4

Rotate bracket and mount the side marked 22.5° against the wall.

5

Rotate bracket and mount the side marked 45° against the wall.

WIRELESS PASSIVE INFRARED BEAM

Anti-Masking:	Active Infrared Detection on both lenses (AM version only)
Average Power consumption:	60uA
Coverage:	15 – 18m, 90° wide on even surface
Detection fingers:	9 (1 every 10°)
Detection Method:	Dual Passive Infrared
Dimensions:	205(L), 70(W), 78(D)
Mounting height:	0.8 – 1.2m
No detection period:	30 seconds after valid detection
Orientation detection:	Optical 30° orientation recognition in any direction
Power supply:	4.5V - 3 X (2000 – 2700 mA/H AA alkaline batteries)
Programmable Sensitivity:	8 sensitivity levels. 1 or 2 pulse count option
Radio communication:	2-Way wireless communication with repeater function
Radio frequency:	868 MHz
Siren Sound level:	95db @ 1 meter
Supervision:	24 Hour RF supervision
Tamper switch:	Tamper when front cover is removed
Walk test Mode:	Audible walk test mode
Warm-up period:	2 minutes (Audible sound during warmup period)
Weight:	450g (Including batteries)
Wireless Range:	1km Line of Sight

WIRELESS CONTROL UNIT

Dimensions:	145(H), 70(W), 25(D)
Average Power consumption:	100 uA
Power Supply:	3 X (2000 – 2700 mA/H AA alkaline batteries)
Battery life:	1 year with recommended batteries
Kwêbeam Radio:	2-Way wireless communication - 868 Mhz
Wireless Range:	350m Line of Sight
Backlight:	White backlight illumination
Touch Buttons:	15 Capacitive touch buttons
LEDs:	Alarm, Tamper & battery status indication
Kwêbeam system control:	Arm Disarm Kwêbeam system
Panic Button:	Sound all Beam sirens simultaneously
Audible sound:	Alarm & Tamper notifications

OPTIONAL TECHNICAL SPECIFICATIONS

KWêHUB	
Dimensions:	30(H), 130(W), 70(D)
Power Consumption:	- Normal mode (WiFi and LTE connected): 30 mA - Low power mode (LTE only connected): 10 mA - Minimal power mode (LTE and WiFi disconnected): 0.1mA
Peak Current:	350mA
Power Supply:	6 – 14V DC / 400mA
Backup Battery:	- 16 hours backup in normal mode (WiFi and LTE is connected) - 24 hours backup in low power mode (LTE connected) - Up to 3 months operation directly from the KwêHub (WiFi and LTE not connected)
Panic button:	Stops or activates all beam sirens
Arm / Disarm button:	Arm / Disarm Home or Away mode
Cellular connections:	LTE/4G with 2G fallback
4G/2G Antenna:	Internal patch antenna
WiFi frequency:	2.4Ghz
Kwêbeam Radio:	2-Way wireless communication with repeater function - 868 Mhz
Piezo Buzzer:	Audible notifications according to Zone number
Notifications:	Push notifications and optional SMS notifications

INTERFACE MODULE	
Dimensions:	116(H), 45(W), 24(D)
Average Power consumption:	60 uA
Peak Power consumption:	70 mA
Power Supply Input:	10– 14V DC
Relay Output:	1 X Relay output (10A / 28VDC) with programmable output delay. Triggers on Alarm events
8 Open Drain outputs:	NC or NO programmable. Configuration option 1: Alarm Zone 1 – 8, Configuration option 2: Alarm Zone 1 – 5, with trouble, panic & alarm state output
Digital input:	Kwêbeam Arm / Disarm input
Kwêbeam Radio:	2-Way wireless communication with repeater function - 868 Mhz
Wireless Range:	1km Line of Sight

UNIVERSAL SENSOR / RANGE EXTENDER / TRANSMITTER	
Dimensions:	116(H), 45(W), 24(D)
Average Power consumption:	35 uA
Power Supply:	2 x (2000 - 2700mA/H) AA Batteries
Battery life:	3 years with recommended batteries
Accelerometer sensor:	Tilt and vibration detection
2 x Inputs:	Alarm and Tamper inputs
Output:	Power output when system is armed
Kwêbeam Radio:	2-Way wireless communication - 868 Mhz
Repeater Function:	Repeaters can be daisy chained for longer distance
Wireless Range:	1km Line of Sight



KEEP IN TOUCH

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