LK CubicDetector W, an intelligent water detector

Design

The LK CubicDetector is an intelligent water detector that protects your home from water and extreme
temperature and humidity damages by measuring water flooding as well as room temperature and humidity.

- Detects and alerts for water leaks when in direct contact with water.
- Measures temperature and humidity to warn from frozen pipes and mold risk.
- When used in conjunction with the CubicSecure, leaks can also trigger an automatic water supply shut-off.
- Can be used independently.

System description

The device should ideally be placed on strategic locations where water damages often occur, e.g. near dishwasher, washing machine, freezer/refrigerator and toilets etc. To maximize protection, the device can automatically shut off the water supply in the event of a leak, when paired with CubicSecure.

MyLK App

With the MyLK app and Wifi connection, you can acknowledge alarms, read temperature and humidity.

MyLK app

QR code to MyLK app.

LK CubicDetector with sensor extension.
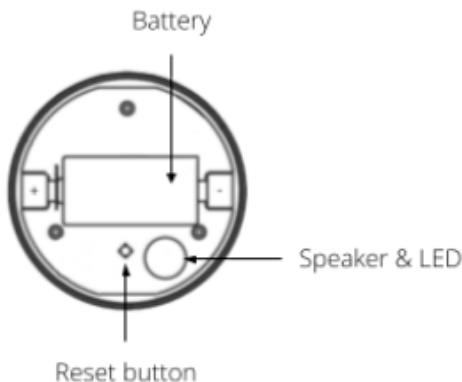
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Common installation areas

Near or under:
- Washing machine
- Dishwasher
- Toilet
- Sinks
- Water heater or boiler
- Water tanks
- Water pumps
- Air conditioners
- Refrigerator or freezer
- Basement
- Bath
- Under or near appliances that use water.
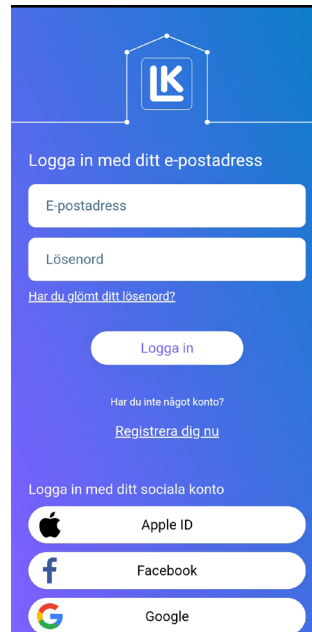
Installation

1. Remove the top cover, by holding the CubicDetector in your hand, while twisting the cover counter clockwise.
2. Pull out the battery insulator, the LED should start blinking blue.
3. When the device blinks blue, it is ready to pair with the MyLK-app. Follow the instructions in the app.
4. When installation is complete in the MyLK-app, put the top cover back in place.
5. Mount the wall bracket if you are using the CubicDetector Sensor as an accessory.
6. Deploy the device in the desired location.
7. The device is now ready to be placed.

Connecting to Wifi

Remote monitoring of the unit's measurements and alarms via a smartphone requires the MyLK-app and a connection to a Wifi network with a frequency of 2.4 Ghz. The app is also required to be able to pair CubicDetector with CubicSecure.
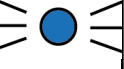
1. Download and install MyLK-app from App Store or Google Play Store.
2. Start MyLK-app and log into the app.
3. Follow the instructions in MyLK-app.

The login page for the MyLK app.

Summary of LEDs

STATUS LED	LED	MEANING AND ACTION
OFF	-	Normal operation when powered.
BLUE, Blinking	(blue LED)	Device is in pairing mode and is visible on Wifi list. Pair using smartphone app.
PURPLE, Blinking	(purple LED)	Device is in abnormal operation mode. Perform a factory reset.
15s RED blinking on wakeup	(red LED)	Device is in offline mode, Wifi not used. Perform a Wifi reset to go back to pairing mode
10s RED + BLUE blinking	(red LED + blue LED)	Device is in fatal fault mode Perform a factory reset or contact the Support.
15s RED blinking on wakeup	(red LED)	Device is in low power mode, Wifii disabled. Replace battery.
Single PURPLE blink	(purple LED)	Device is booting up.

Factory Reset

1. Remove the top cover, by holding the CubicDetector in your hand, while twisting the cover counter clockwise.
2. Remove the battery.
3. Press and hold the reset button while putting back the battery.
4. Release the button when the LED starts blinking purple.
5. Attach the top cover, in reverse order of removal. Turn the top cover until the three notches align.

WiFi Reset

1. Remove the top cover, by holding the CubicDetector in your hand, while twisting the cover counter clockwise.
2. Press and hold the reset button for 10 seconds.
3. Release the reset button when the LED turns purple.
4. The device will now be in pairing mode and the LED should be blinking blue.
5. Put back the top cover in place.
6. Uppdate the Wifi connection in MyLK-app.

Alarms

ALARM	LED	MEANING AND ACTION
Continuously beeping + RED blinking	(red LED)	Water is detected in direct contact with the device or leak sensor cable. Remove device from water and check for leaks.
Single beep every 30 min	Beep	Low battery warning (< 5%) and is in low power mode. Replace battery

Maintenance and service

If the LK CubicDetector is faulty, contact your local supplier for further assistance. If external parts need to be replaced, only LK spare parts should be used. See www.lksystems.se

LK

TECHNICAL DATA

Area of use	Villa, terraced house, apar ment
Storage	5 °C ... 55 °C
Environment	Indoor usage
Temperature range	-25°C … 60°C
Temperature accuracy:	±1.5°C
Humidity range	0 - 100 % RH
Humidity accuracy	± 5 %
Sound level:	85 dB
Wireless frequency	2.4 GHz Wi-Fi, (802.11bgn)
Data resolution:	The CubicDetector measures temperature and humidity every 30 minutes and sends it to the Cloud every 24 hours
Weight	80 grams
Dimensions	25 mm height: 67 mm width, 67 mm length
Leak sensor cable:	1219 x 27 x 8 mm
Replaceable battery:	CR123A lithium cell, up to 3 years battery life*
Warranty:	2 years

The battery life depends on the total duration of which the device is in active Wi-Fi mode and alarm mode .

PACKAGE CONTENTS

- CubicDetector W - 1x and CR123A Lithium cell included - 1x, RSK 188 26 88
- Accessory: CubicDetector Sensor. Optional wall mount with self-adhesive backing - 1x, Wall mount screws - 2x, Leak sensing cable - 1x, RSK 18826 87

COMMENT

Completely interference-free operation cannot always be guaranteed with the technology available today, which allows free use of the frequency band.

Every installation should therefore be tested individually. LK CubicDetector always works independently. LK CubicDetector will still work if the unit loses contact with the Internet. The unit is still in operation and emits an alarm when a leak is detected. The contact with the MyLK app is temporarily interrupted, and it then does not receive notifications or alarms until contact is established with the Internet

ENVIRONMENT

LK Systems is affiliated with El-Kretsen for collecting and recycling electronics and batteries. Used batteries should be sorted as batteries or small batteries and deposited for battery recycling. When the system has reached the end of its life, it should be sorted as electronics or other electronics and deposited with a recycling centre.

GUARANTEE

LK Systems AB is responsible for faults in products that appear within two years from the delivery of the product to the buyer. If LK is responsible for the fault in the product, LK has the right to replace the product with either a new or repaired product. The liability period for replacement or repair of a product or spare part does not exceed the liability period for the original product. The seller is not responsible for faults resulting from accidents, incorrect installation, incorrect installation, incorrect care, abuse or other irregular use. LK Systems AB is not responsible for any loss or damage caused by a non-functioning product. Its responsibility is strictly limited to the replacement of the product.

CE APPROVAL

EU Declaration of Conformity, Radio Equipment Hereby, LK Systems declares that the radio equipment type CubicDetector - QCD01 is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available on www.lksystems.se/sv/teknisk-dokumentation/