

# Homematic IP Wired

Smart Living, Simply Exciting.



homematic <sup>IP</sup>  
wired





Planning a new build or extensive refurbishment and want to equip your home with smart home automation?

WIRED: THE PERFECT SOLUTION

## Wired

From start to smart



Homematic IP makes the latest smart home technology available to everyone. The innovative system of eQ-3 has been developed specifically for the needs of the customer and is one thing above all: easy. And that without compromises in functionality, security and data protection. This helps to overcome barriers and accelerates the users acceptance.

The latest development of eQ-3 is a bus variant of the smart home system, the product line **Homematic IP Wired**. This is mainly characterised by its robustness and immunity to interference. The initial installation is best carried out by a specialist retailer for new buildings or in the course of a house renovation.

Retrofitting of wireless components can be carried out by the customer himself at any time. Also cable system extensions are still possible afterwards – allowing a long-term customer loyalty for the professional installer. **All Homematic and Homematic IP devices – whether wireless or wired – are compatible and can be connected with each other.** This makes Homematic IP the ideal solution for a smart home.



# What makes Homematic IP so special?

The Homematic IP system is an open platform that can be flexibly used and expanded by the customer. The device communication is based on the Internet Protocol, IPv6, and is thus ideally equipped for the Internet of Things. In addition to its proven wireless product line, eQ-3 now also provides a wired smart home solution with Homematic IP Wired.

## Maximum reliability

All Homematic IP devices are characterised by very high reliability. The wireless components work at a frequency of 868 MHz with constant bi-directional communication, ensuring confirmation of all radio commands. In Homematic IP Wired, the components are connected to each other by a bus line. This makes it possible to establish direct links between the devices. For most functions, the devices communicate directly with each other and commands must no longer necessarily converge at a central point. This makes the entire system particularly fail-safe.

## Security and data protection at the highest level

During installation of the system, the communication of Homematic IP is secure and cannot be manipulated. At no time, entering of personal data is required. The system is completely anonymous, respects the privacy of the user and thereby ensures the protection of data. The transmission of information is encrypted and authenticated at all times. Reading, changing or other types of attacks are excluded.



## Robustness and immunity to interference

During the development of each single Homematic IP component, the immunity to interference is especially important. The wireless devices undergo numerous tests, so that interference caused by WiFi networks, video streaming or other users can be excluded. The wired system is characterised by a ring topology: The bus is always connected from the Homematic IP Wired Access Point to the next device and finally back to the Access Point. If the wire is interrupted at one point, the topology automatically changes to two independent bus lines. This makes sure that the devices still continue to work.

## Intuitive handling

Homematic IP has been designed for simplicity and usability. The wireless devices can easily be installed and operated via plug and play without technical knowledge. With a free smartphone app, the system can be operated intuitively. The Homematic IP Wired products are connected to each other via bus line. The Access Point is used for connection either to a smart home Central Control Unit in the house or the cloud service on the Internet.

# Homematic IP Wired – The next Smart Home Generation

With Homematic IP Wired, eQ-3 provides an innovative smart home system, offering new opportunities for specialist companies as well as consumers. The direct communication of the devices via cable connections ensures a high level of robustness and immunity – advantages that make Homematic IP Wired the ideal solution.

## Interference-proof

Homematic IP Wired is particularly reliable and resistant to interferences. Through direct connection of the devices via cable, external influences such as radio waves for example do not interfere the communication. This allows for a reliable data transmission at any time. Commands do not necessarily converge at a central point, but for most functions they can instead be exchanged directly between the devices involved. This has the advantage that the failure of one single device does not cause the entire system to collapse – as is the case with many other smart home systems. The direct connection also increases data transmission speed to 50 to 150 milliseconds.

## Robust

For the first time, Homematic IP Wired offers easy installation of fault-tolerant networks for a building bus system. In contrast to other bus systems, it works by means of a so-called ring topology: The bus is always connected from the Homematic IP Wired Access Point to the next device and finally back to the Access Point. If the wire is interrupted at one point of the ring, the topology automatically changes to two independent bus lines. This ensures that the devices remain in operation even in case of a cable error. During the installation, branches in this ring topology can be flexibly arranged. Even multiple loops are possible with Homematic IP Wired.





# Homematic IP Wired – The next Smart Home Generation

## Secure

Homematic IP Wired offers a very high level of security. All products are encrypted and authenticated in the factory settings. The connection of new devices is cryptographically protected. At no point the customer will be asked to enter personal data. The system is completely anonymous and respects the privacy of its users in an exemplary way. At the same time, there is no risk of targeted attacks by data theft in the cloud. All Homematic IP Wired products for DIN rail mount are reviewed and awarded comprehensively, neutral and independently by the German Technical Association VDE regarding security, electromagnetic compatibility and the fulfilment of legal protection requirements.

## Cost-effective

Homematic IP Wired offers great value for money: The innovative system helps to save money while, for the first time, it is possible to equip a house with smart home technology more cost-effective than with today's prevailing electrical technology. And all this without any quality impairments for the user. A complete house installation with Homematic IP in new buildings can be realised for less than €3,000. For comparison: A conventional installation typically costs between 10,000 and 35,000 Euro. These cost savings are made possible by a new software technology and most modern microelectronics.

## Compatible

Most of the wired devices can be combined with more than 60 wireless Homematic IP components available. This allows the user to easily expand an "old" system by new devices. For larger houses, it is also possible to set up a decentralised distribution with one or more sub-distributions. Similar to the wireless devices, the communication of the bus

system is based on the new generation of the standardised Internet Protocol IPv6. This is a major advantage, because it makes Homematic IP Wired an open platform that can be flexibly expanded with other devices.

For the customer, Homematic IP Wired is especially interesting because it is good value for money – in comparison even significantly cheaper than a normal electrical installation. Homematic IP Wired can help to save money in operations such as switching and dimming of light sources, controlling of floor heating systems and shutter control according to the sunlight. These sales arguments make it particularly easy for the installer to convince the customers by the benefits of the system. At the same time the installer can position himself as modern provider and gain competitive advantages. In this way, specialists can directly profit from the mega-trend smart home and the emerging industrial transformation of domestic electrical systems.

# Smart Home as opportunity for specialist retailers

Specialist companies hardly offer complex smart home solutions due to the work required. eQ-3 now offers the possibility with its new product line Homematic IP Wired to enter this field and maximise the profit. The system is fundamentally different from other smart home solutions and therefore suitable for installers as well as end customers.

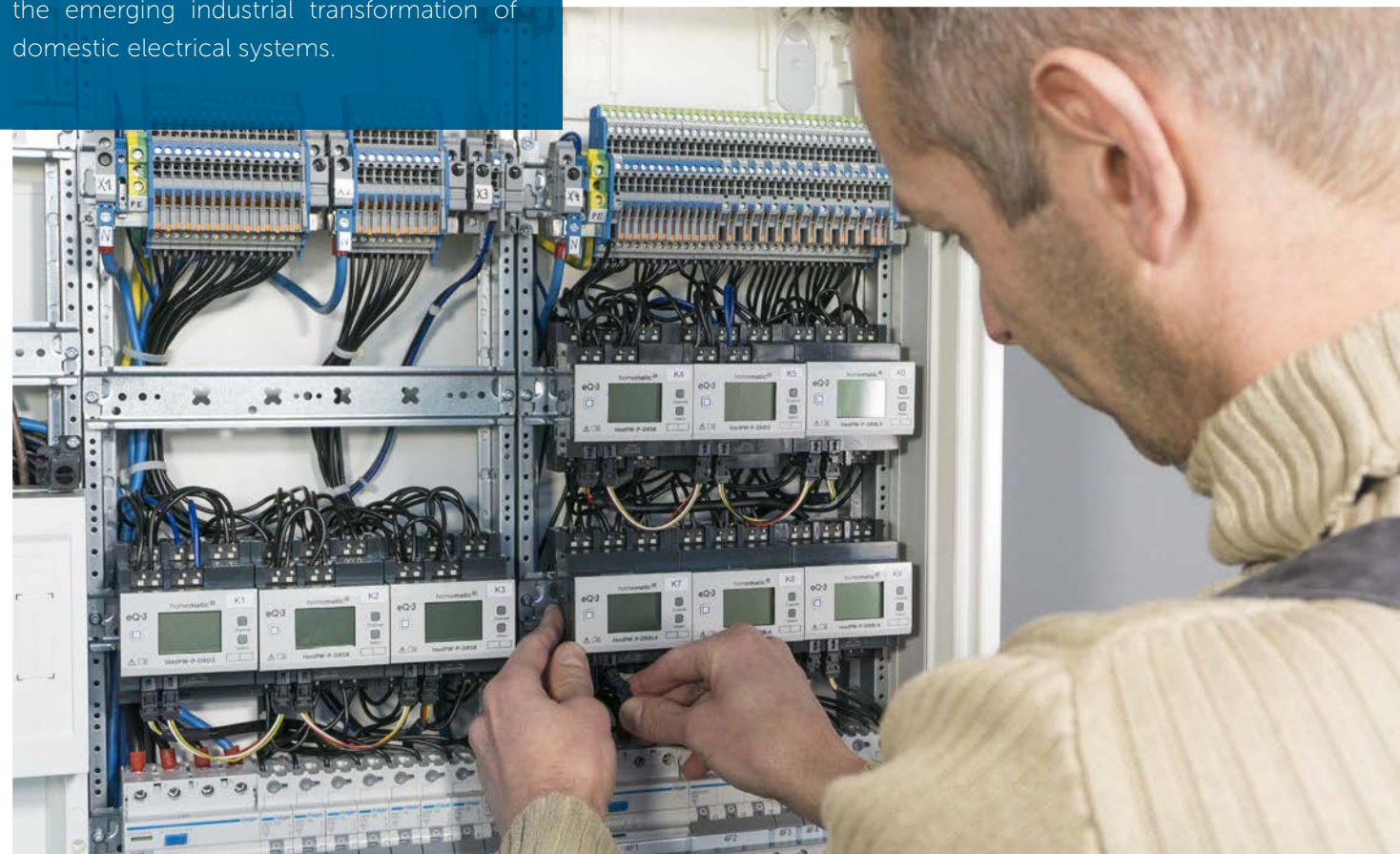
Thanks to the advanced technology, planning, installation and configuration of the system are as easy as never before. Most specialist companies can take over these tasks after training and a brief instruction. For long-term configuration and system maintenance, additional services can be offered, ensuring further profit. The broad product spectrum of Homematic IP also offers many possibilities for extensions – both at initial installation, as well as for retrofitting at a later point in time.

## Installation:

Homematic IP Wired devices are mounted on DIN rails in the distribution board. They are connected to the bus system with pre-assembled plug connectors. The rail-mounted devices have a width of only four module units, making the installation very flexible. Vertical wiring space between the devices is not restricted – this makes the installation faster, clearer, less error-prone and, above all, more secure. The correct wiring can be tested after installation without prior configuration and programming, directly at the device itself and installation can be approved without any time delay.

## Configuration:

Setting-up the Homematic IP Wired devices is very easy and can be done by any specialist after a training and brief instruction. The Central Control Unit CCU3 offers the opportunity to realise a basic configuration. After approving the installation, the password can be provided to the customer for further configuration. Many customers are interested in taking care of further configuration by themselves. Nevertheless, should problems arise, the specialist can easily provide support – also by remote maintenance.



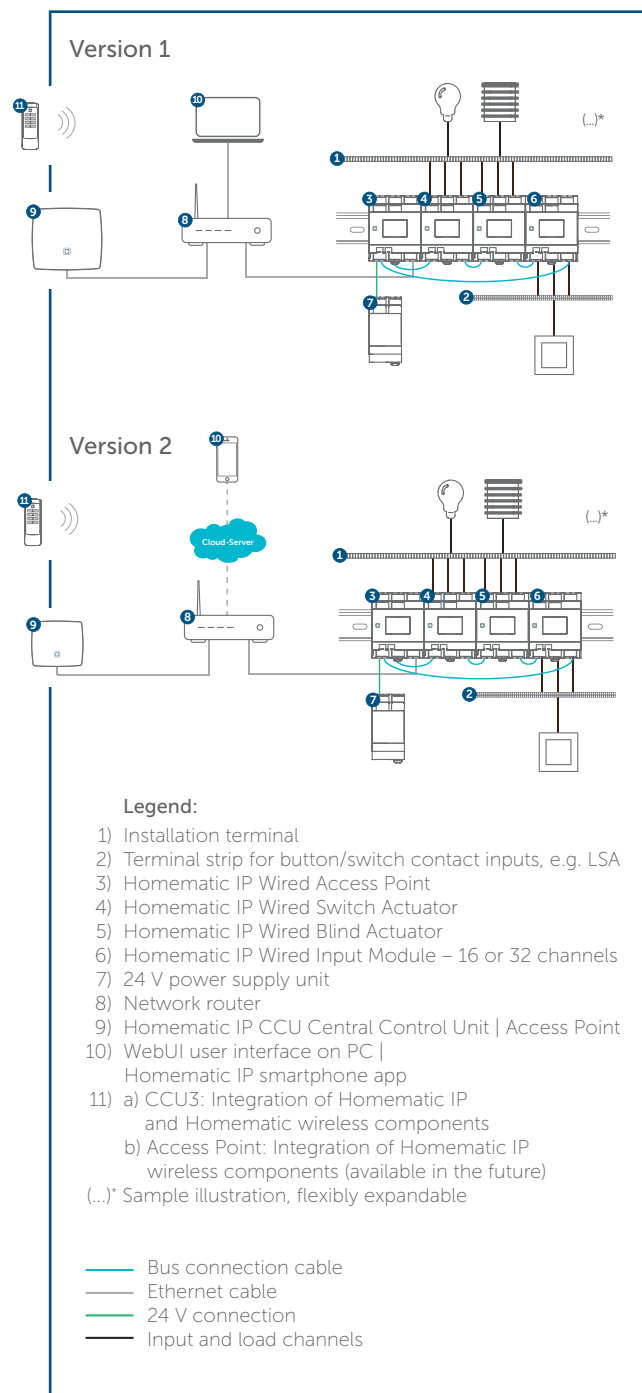


# How can I configure the smart home system?

Connection via the Homematic IP Wired Access Point is either to a local smart home Central Control Unit in the building or to the Homematic IP cloud service (available in the future). Specialist companies and end customers can choose between two basic configuration versions:

**Control via Wired Access Point and CCU3, via PC, or remote control:** In this scenario, the installation and configuration is done locally with the CCU3 smart home Central Control Unit or, alternatively, the central control unit of one of Homematic IP's partners. A web browser is used for the configuration. Control from anywhere in the world is possible via VPN solutions in DSL/internet routers or secure remote access solutions from partners.

**Combined control of wireless and wired devices:** It is possible to connect existing Homematic IP wireless systems to the wired version or to expand a Homematic IP wired solution later with wireless components. The devices are then controlled using the CCU3 via remote controls, motion detectors or partner apps.



\*A Homematic IP Wired Access Point is required for operation. Smartphone app control can be achieved via the CCU3 using various apps from our partners. Control via the Homematic IP app will also be available in the future.



## The Central Control Unit for smart home experts:

The CCU3 is the latest generation of the tried-and-tested predecessors, the CCU and CCU2. It can be used in conjunction with a Wired Access Point\* for local in-house device communication.

# Installation: Connection of modules and sensors

Homematic IP Wired devices for DIN rails are connected with up to 16 or 32 buttons or switches. For field installation (outside the distribution panel), standard flush-mounted push-buttons or switches can be used. This means that Homematic IP Wired can be integrated into the existing switch systems. When connecting input/output modules and sensors, the installer has three options which can also be combined with one another as required:

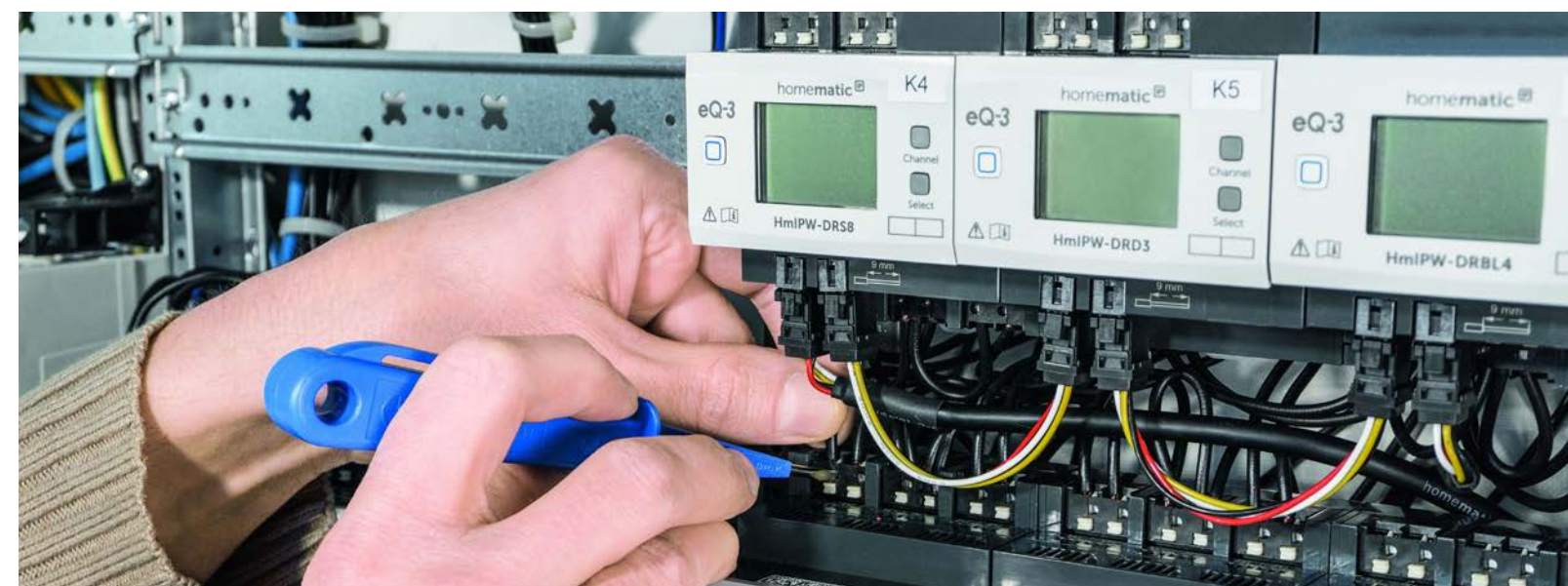
## 1. Combination with the Homematic IP wireless solution:

Sensors and switches from the Homematic IP Wired range can be combined with the previous wireless solution as required. The position of the switches does not need to be determined in the construction phase since wireless devices can be used as required anytime – even at a later date. Using Homematic IP Wired switch and dimming actuators, light sources can be turned on and off or dimmed within the smart home. Shutter control elements such as shutters, blinds and awnings can be controlled based on time or weather data.

## 2. Installation with low-voltage buttons and switches:

Since the inputs are electrically isolated from the 230/400 Volt mains voltage, the wiring is particularly easy and inexpensive using simple phone wires or low voltage lines. This can also eliminate the need for the cost-intensive and time-consuming preparation of vertical slits for NYM lines, resulting in substantial cost advantages.

**3. Installation of the Homematic IP Wired bus system throughout the whole building:** In this scenario, the Homematic IP Wired bus is installed not only in the power distribution cabinet, but is routed through the building with sensors and input/output modules. An initial Homematic IP wired device for the stand-alone installation is a module with six channels, connected to conventional buttons and switches for flush mounting.



# Homematic IP at a glance

The Homematic IP product range is steadily growing. With its broad portfolio, the smart home system not only offers convenience in the everyday life, but also increases the security within your own four walls. Homematic IP can be expanded at any time – not only with products from the own range, but also with over 90 components of the origin Homematic system.

## Climate control

Entering a warm bathroom in the morning – who wouldn't want that? The climate control devices of Homematic IP can be easily adjusted to personal preferences. This allows a high living comfort and energy cost savings of up to 30 percent at the same time. With the free app, individual heating profiles can be created for every single room. Afterwards, your heating will be controlled automatically and makes the everyday life easier.

## Light & shade

The right lighting makes the own house a cozy home. With Homematic IP, lights can be switched and dimmed easily and quickly from the sofa. In a few single steps the right mood for an evening in front of the TV is created. Devices for shutter and awning control create privacy and increase the security at the same time. Control via the app makes it possible to create individual heating profiles.

## Security & alarms

With Homematic IP security components, no burglar can enter unnoticed. In alarm mode, window and door contacts immediately inform about unusual activities. Motion and presence detectors reliably monitor the surroundings while sirens and smoke alarms trigger an alarm that cannot be ignored when detecting a burglar or fire. Just a quick glance at the own smartphone is all it takes for the house owner to see that everything is in the best order at home. In this way, owners can feel safe even when being away from home.

## Weather & environment

The weather sensors are the latest highlight from the Homematic IP product range. With the weather sensors, the system is automatically adjusted to the current weather condition. The sensors measure external influences such as temperature, wind strength or rain, the system captures these data and evaluates them. In connection with other Homematic IP devices, the sensors trigger the automated moving of awnings or shutters, depending on the current weather. This actively protects the house from environmental influences.



The Homematic IP products can be easily and conveniently controlled via Google Assistant or Amazon Alexa. Voice commands offer intuitive operation of the smart home.

# Homematic IP for specialist retailers

In order to ensure high-quality and individual support, eQ-3 provides specialist retailers with assistance in offering services and products in a profitable way. Thus, the Homematic IP brand can commonly continue to be further strengthened in the market. For this purpose, eQ-3 regularly offers Homematic IP training courses for specialist retailers. Participants will learn in smaller groups how to configure complex smart home scenarios as well as possibilities for remote maintenance and programming.

You are specialist installer and interested in Homematic IP?

**eQ-3 Regional Sales | [www.homematic-ip.com/en/partners.html](http://www.homematic-ip.com/en/partners.html)**

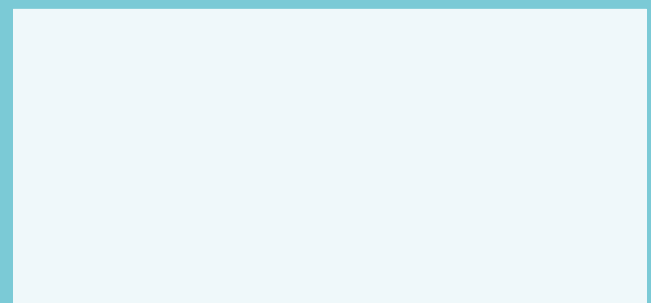
## Homematic IP is a brand of eQ-3 AG

eQ-3 AG  
Maiburger Straße 29  
26789 Leer, Germany  
[www.eQ-3.de](http://www.eQ-3.de)  
[support@eQ-3.de](mailto:support@eQ-3.de)

Phone: +49 491 600 8 600  
Fax: +49 491 600 899 600

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