

# B-COMM IoT 90 70: extremely versatile time recording and access control



## What exactly is B-COMM IoT 90 70?

B-COMM IoT 90 70 is a standalone micro PC with a low-maintenance, efficient Unix operating system on which B-COMM communication software is already pre-installed at the factory and pre-licensed. B-COMM IoT 90 70 is only connected to the network at the customer's premises and is immediately ready to communicate in the cloud, thanks to the AMQP universal interface.

## Advantages at a glance:

### Saves space and resources

- No in-house IT is required for administration
- Easy installation of the IoT Box
- So small it fits anywhere

### Easy transition to the cloud

- Data communication from cloud-based partner applications to the time recording and access components.
- Upgrade to the cloud possible at any time
- On Premise data exchange remains unchanged

### Maximum level of functionality

- Independent of the operating system
- Can be used worldwide thanks to Unicode
- Secure data exchange

### Protected investment

- Compatible with previous terminal generations
- Ongoing development and free updates

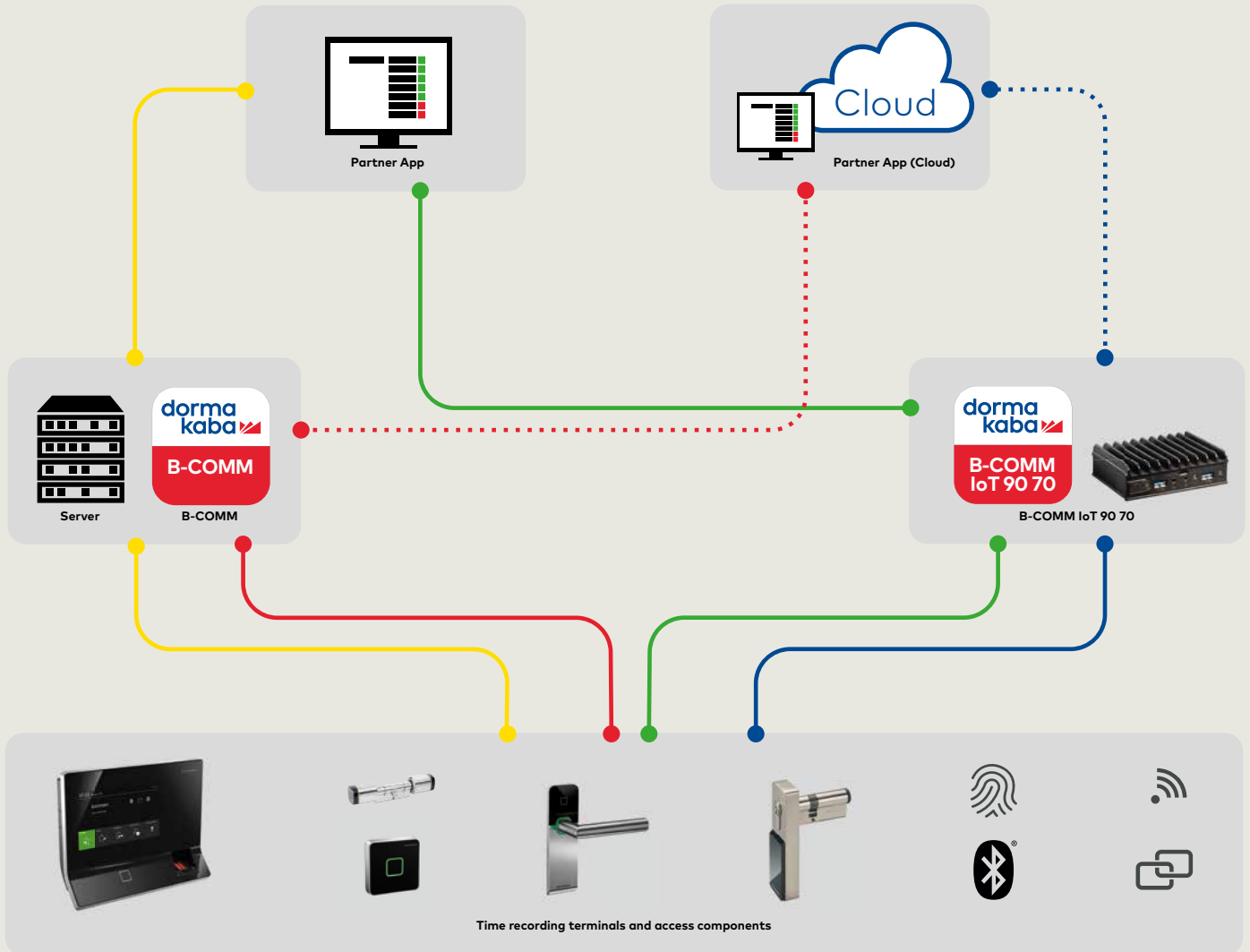
### Maximum convenience

- Single user interface
- Cross-platform data interface (AMQP)
- Rapid installation and setup

## The route to the cloud.

Depending on the company, there are different stages of cloud progress. While some companies still rely entirely on On Premise solutions, others have already completely switched to the cloud. And many operate in an in-between migration status.

But don't worry: if you still rely on the classic B-COMM, you can upgrade to B-COMM IoT 90 70 at any time with minimal effort. There are four possible scenarios:



**01** On Premise solution

The partner application runs On Premise. Locally installed B-COMM is communication software that ensures data exchange to the application in the background and parametrises the hardware.

**02** On Premise to On Demand migration solution

The partner application runs in the cloud and communicates with the locally installed B-COMM in the network. This ensures the exchange of data with the time recording terminals and access components.

**03** Migration solution Host PC to IoT Box

The partner application runs On Premise and communicates with the autonomously running B-COMM IoT 90 70 integrated into the network. Commissioning and operation do not require additional computers, servers or IT installations. B-COMM IoT 90 70 independently obtains data from the time recording terminals, as well as the access components, and ensures reliable communication with the partner application.

**04** Holistic cloud solution

The partner application runs in the cloud. It communicates with the B-COMM IoT 90 70 via a broker and the AMQP universal interface.

All the time recording and access control runs in the cloud and exchanges data with the time recording terminals and access components.

## Continue to benefit from the tried-and-tested advantages of B-COMM

The micro PC retains the well-known advantages of B-COMM. Thanks to configurable modules and compatibility with all terminal and reader generations, it continues to provide full cost control along with investment security.

And B-COMM continues to provide the customary extremely high levels of functionality and convenience, and offers you secure data exchange via the standardised AMQP interface.

- **B-COMM server**

The server makes available all the objects and methods that are accessed by the other components via Remote Method Invocation (RMI). It also manages the complete configuration of the overall system and communicates with all components and the connected application. Communication to a cloud-based partner application is carried out via the ISO-certified AMQP protocol.

- **B-COMM IO**

The communication component is responsible for exchanging data between the terminals and access components, as well as the partner application. The partner application can be accessed "On Premise" as well as "On Demand" via a broker. In line with requirements, the data is transferred in both directions; and therefore all records and activities are logged and stored in a booking file.

- **B-COMM GUI**

B-COMM GUI ensures the graphical representation of the administration and configuration of the entire system – for example, displaying users, clients, channels, network adapters, terminals and jobs. The components can be installed separately and more than once on the client side.

- **B-COMM Helper**

If a partner application is not programmed in Java (not RMI-capable), B-COMM Helper is used as an interface. The Helper then converts the data from TCP/IP to RMI, and also vice versa, from RMI to TCP/IP.

## AMQP – Advanced Messaging Queuing Protocol

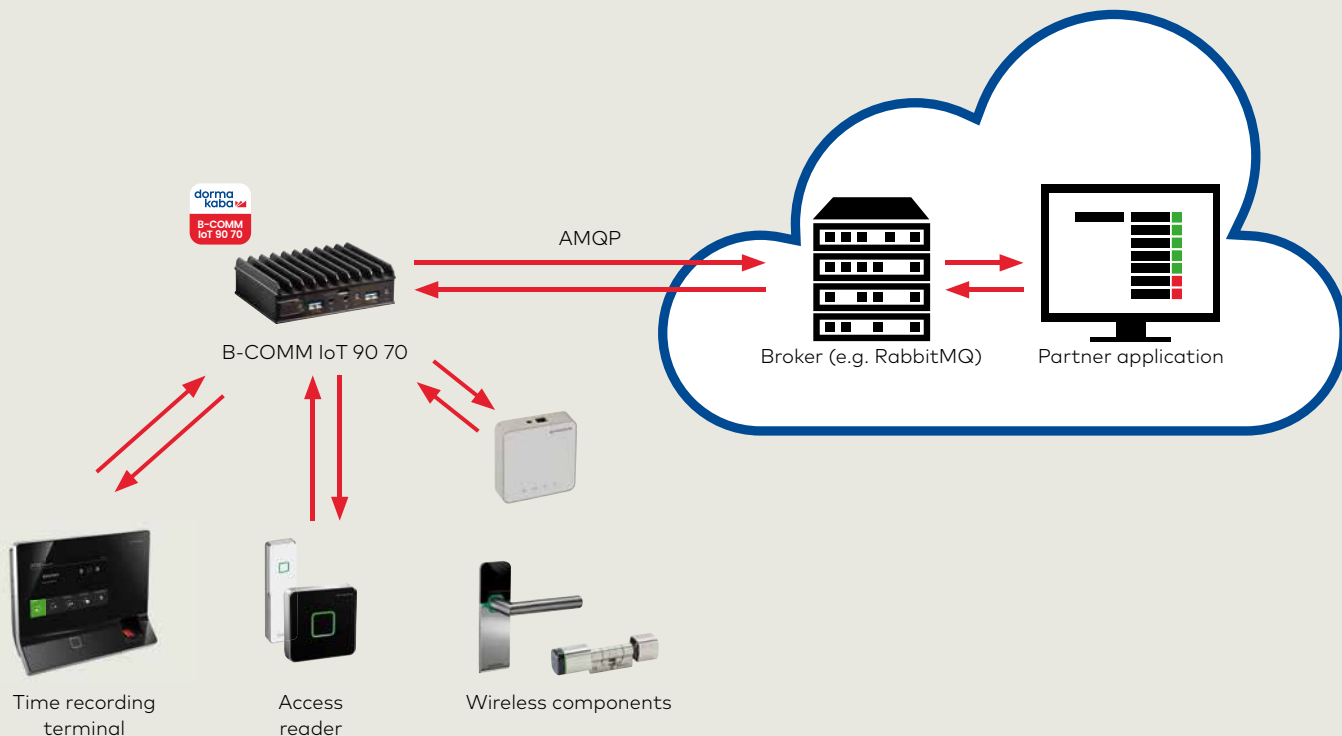
The Advanced Message Queuing Protocol (AMQP) is a flexible and open internet protocol for business messaging applications. It helps connect different business systems or platforms and provides required information about processes.

As a user, you benefit particularly from the high data persistence, i.e. the error rate for data loss is very low compared to other protocols. Data transmission is consistently reliable and independent of network quality, even over longer distances. In addition, different programming languages are compatible with each other and there is the messaging function as a cloud service.

- Reliable queuing, topic-based publishing and subscribing, flexible forwarding
- Session and transaction-based messaging
- Highly efficient for packet sizes of 60 bytes
- Security standards: TLS, SASL
- All AMQP clients are interoperable with all AMQP servers
- International standard, certified according to ISO 19464

## Configuration example

Connecting a B-COMM IoT 90 70 with a configured terminal system or access components to a cloud-based partner application using a broker. dormakaba recommends using RabbitMQ as the broker. The communication protocol used is AMQP.



**Do you have any questions?**  
We would be happy to assist you and look forward to hearing from you.

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