

Data acquisition of the newest generation - new features and functions in ibaPDA-V7





# Fit for the upcoming requirements of data acquisition



With the new version v7, ibaPDA has become even more flexible and more efficient. A new data format with more flexible properties, enhanced functions with text signals, a better security with password protection and a new license model are just some of the new features.

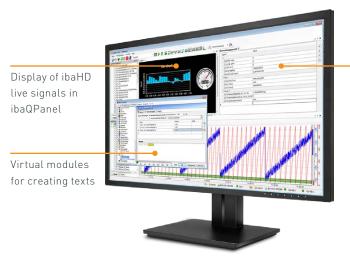
### New format for measurement files

- > File sizes up to 64 GB
- Password protection for measurement files
- ➤ Enhanced compression rate of fastly changing signals which results in smaller file sizes
- All text information is coded in UTF-8, which allows a combination of different languages in only one measurement file (e.g. Chinese and English).
- Possible assignment of higher module and signal numbers (a benefit for ibaQDR-applications) ibaAnalyzer-V7 has to be applied to analyze these measurement files.

### Independent ibaPDA client and server versions

 Client and server versions can be different.

Therefore it is no longer necessary to up- or downgrade the software of the ibaPDA client, when a client access to different server versions is intended.



"Watch view" for a concise overview of signals and their actual values

### Text signals replace Technostrings

- Text signals are analog signals of the STRING type and belong to a normal module
- Basically text signals behave as analog signals
- A combination of text and numeric signals in a module can be realized for many interfaces, e.g. in the Generic UDP and Generic TCP interfaces
- New functions for the processing of text signals in virtual modules, e.g. the concatenating

- of text, the conversion from number to text or the selection of a section from a text etc.
- New text splitter modules for processing of text over delimiters (e.g. \*.csv format) as JSON or strings with fixed width.
- Playback modules and the offline trend graph in ibaQPanel support text signals
- Easy switching of texts with the "if" or new "switch function" based on text signals.

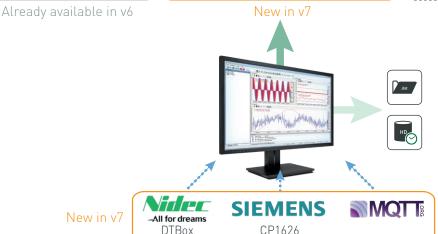
### **Northbound**







Planned



Southbound

### Enhanced display

New "Watch view" for online data display in the client: In the "Watch view" signals can be arranged in a list to display the actual value of multiple signals in a comfortable and handy way.

## Support of the Siemens communication processor CP1626

The CP1626 is the PCI Express successor of the CP1616. The license ibaPDA-Interface-Profinet-CP (31.001350) allows you now to use both CP1616 and CP1626.

#### Integrated IEC61850 server

- Create your own data model via the supported logical node types GGIO, IARC, LCCH, LPHD, LTMS and RDRE
- Up to 16 client connections are allowed in parallel
- MMS: Polling, unbuffered and buffered reports are supported

### Data streaming to external "ecosystems"

- Streaming time-based data into Apache Kafka clusters and Microsoft Event Hubs.
   Continuous and triggered streaming is possible.
- Streaming time-based data into the Siemens MindSphere cloud. Continuous and triggered streaming is possible.

### New communication interfaces

- MQTT interface to subscribe topic data from MQTT brokers
- Connection of Nidec DTBox systems

### New Features of add-on products

#### ibaQDR

- ➤ A new measuring location to model a reversing stand.
- A dividing measuring location to model scrap and dividing cuts
- Product files can be generated on every measuring location
   Therefore ibaQDR-V7 can now

also be used in hot rolling mills.

#### ibaQPanel

 Almost every graphical element of the ibaQPanel can visualize ibaHD live signals.

This allows you to create ibaQPanel solutions not only based on ibaPDA signals, but also on HD signals.

### ibalnSpectra

The auto-adapting module automatically learns spectra under different process conditions and uses them as a reference to recognize changes in the spectrum over a certain period of time.

### Planned features

#### ibaPDA v7.1

- > MQTT data store
- > SINUMERIK Xplorer interface
- Interface to Micro-Epsilon laser scanner

### ibaPDA v7.2

- Database data store (online writing to ODBC databases)
- Read access to databases (e.g. MES)

### **New licenses**

Order no.	Name	Description
30.770064	ibaPDA-V7-64	Basic package with server/client application, for 64 measuring signals
30.770128	ibaPDA-V7-128	Basic package with server/client application, for 128 measuring signals
30.770256	ibaPDA-V7-256	Basic package with server/client application, for 256 measuring signals
30.770512	ibaPDA-V7-512	Basic package with server/client application, for 512 measuring signals
30.771024	ibaPDA-V7-1024	Basic package with server/client application, for 1024 measuring signals
30.772048	ibaPDA-V7-2048	Basic package with server/client application, for 2048 measuring signals
30.774096	ibaPDA-V7-4096	Basic package with server/client application, for 4096 measuring signals
30.778192	ibaPDA-V7-8192	Basic package with server/client application, for 8192 measuring signals
30.779999	ibaPDA-V7-unlimited	Basic package with server/client application, for unlimited measuring signals
30.770022	ibaPDA-V7-Data-Store	Add-on license for writing two more measurement files (*.dat)
30.770024	ibaPDA-V7-Client	Extension with one more client
30.770025	ibaPDA-V7-Multi Client	Extension with five more clients
30.670052	ibaPDA-IEC61850-Server	Add-on license IEC61850-Server
31.001112	ibaPDA-Interface-MQTT	MQTT communication interface
30.670160	ibaPDA-Data-Store-Kafka-16	Writing into an Apache Kafka Cluster, 16 signals
30.670161	ibaPDA-Data-Store-Kafka-64	Writing into an Apache Kafka Cluster, 64 signals
30.670162	ibaPDA-Data-Store-Kafka-256	Writing into an Apache Kafka Cluster, 256 signals
30.670163	ibaPDA-Data-Store-Kafka-1024	Writing into an Apache Kafka Cluster, 1024 signals
30.670180	ibaPDA-Data-Store-MindSphere-16	Writing into the MindSphere cloud, 16 signals
30.670181	ibaPDA-Data-Store-MindSphere-64	Writing into the MindSphere cloud, 64 signals
30.670182	ibaPDA-Data-Store-MindSphere-256	Writing into the MindSphere cloud, 256 signals
30.670183	ibaPDA-Data-Store-MindSphere-1024	Writing into the MindSphere cloud, 1024 signals
ibaQPanel		
30.670040	ibaQPanel-V7-Add-On	Add-on license for an ibaPDA-V7/ibaHD-Server-Client for free design of display objects similar to a HMI functionality

For using ibaPDA-V7 a new license is required on your dongle in any case also when migrating from v6 to v7. Please contact your regional iba representative on possibilities and conditions for migrating from v6 to v7. You will find your regional iba representative listed on our website (https://www.iba-ag.com/en/contact).

To be able to process or analyze the measurement data in the new format as usual with other iba products, these products must also be updated to at least the following new versions:

- → ibaAnalyzer v7.0.1
- → ibaDatCoordinator v2.2.0
- → ibaCapture v4.4.0
- → ibaHD-Server v2.3.0
- → ibaDaVIS v2.2.1
- → ibaLogic v5.5.0

With the release of ibaPDA-V7 the distribution and further development of ibaPDA-V6 is discontinued. Since then, updates are provided exclusively for ibaPDA-V7.

### ibaQPanel license model

The license ibaQPanel-V7-Add-On is an add-on license to a ibaPDA client or ibaHD client for free design of display objects similar to a HMI functionality. Signals from an ibaPDA server and/or an ibaHD-Server can be used for this purpose. An ibaHD-Server connection allows you to use all of the HD stores included there, which can be fed from different ibaPDA servers.

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