# News, Products, Dates, Tips und Services. International



# The new iba presence – A fresh look and additional features

We have been online with our new Internet presence since September. After a thorough redesign, we can offer you a number of innovations: more up-to-date information and new and helpful features on a user-friendly interface in the new and fresh iba design. We are particularly proud of having realized this project with the help of our own web team.



Known address in a brand new guise: www.iba-ag.com

# Up to date – both technically and in content

One of our main concerns when designing our websites was to make sure that our visitors quickly find the information relevant to them - whether it is the latest news, events, new products, contact persons or the direct link to our support team. Due to a clear and easy to understand navigation, the user never loses track. Quick starts in interesting topics and the simplified search function purposefully lead the user to all relevant information. With the help of the open source solution TYPO3, the website was also being technically upgraded. On top of this, an interface to our ERP system keeps the product information up-to-date at all times.

# Access all features with just a few

Apart from the navigation bars on top and on the left, the right hand column provides direct access to the latest information such as the latest announcements concerning dates, events and new products. Moreover, you directly get to the iba help desk. Here, you find all important links at a glance if you have any technical queries concerning our products. You can either contact our support team via a mail form or browse the FAQ list first. Frequently. our users already find the answer to their questions here. Furthermore, the download area provides product information, application reports and the latest issues of our company magazine "EINblick". We

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### Dear reader

The present issue of our company magazine "EINblick" is completely dedicated to the topic "website". We spent a lot of time, made a huge effort and put our heart and soul into the Internet presence of the iba AG to make it more attractive and informative. We extended and improved our tried and tested functionalities that were already intensively used by our dear customers before we redesigned our Internet presence. The main focus, however, was to offer more than just a mere product catalog - we wanted to give you an overview of the applications possible due to the iba technology. This is how we want to address new customers less familiar with our technology. Just click and have a look! We appreciate your feedback at all times.

Despite all the possibilities of digital communication, we still prefer the direct contact to our customers. We hope to welcome you at the SPS/IPC/Drives in Nürnberg this year again and are looking forward to interesting conversations. At this year's SPS fair, we are able to present the modular ibaPADU-S system which is now available for unrestricted distribution: whether as classic I/O system connected to ibaPDA via the central unit ibaPADU-S-CM or as intelligent system with ibaPADU-S-IT and ibaLogic, the possible applications are nearly unlimited and range from flight recorder applications to digital control systems and condition monitoring. Our cooperation with the Austrian software company logi. cals opens new possibilities to develop solutions on intelligent iba components with logi.cad and the condition monitoring library logi.guard.

What should be interesting for the many users of the automation technology, is our function extension to the Profibus Sniffer ibaBM-DPM-S making it possible to acquire data of redundant SIMATIC S7-H systems.

So, don't just click, but stop by!

Kind regards

U. Je Han



Continued from page 1

also offer interesting presentations as, for instance, held on one of our iba days as downloads. Here, you will find out from our customers' point of view how they solved their problems with the help of iba.

# The right solution for every demand

Our category "Applications" is brand new. Here, you will find a number of application examples that show very graphically with the help of real-life examples which solutions have been realized with iba products: it ranges from plant monitoring to quality reporting and from condition monitoring to automation solutions and plant upgrade work. You learn which demands we had at the beginning of a project, which iba products have been used and, of course, what the project's benefit for the customer was. We are sure that you will find a solution for your demand, too.

# Get quickly and conveniently to our offer

The category "Products" was completely redesigned and orients itself by the functional aspects of our products. The product portfolio is categorized accordingly and its usability has been greatly improved. We have attached particular importance to getting where you want with just a few clicks despite our products' great diversification. A subtle marking in the navigation menu always shows you where you are. The request for current information has been realized with the category "New Products" summarizing again the latest innovations. The menu item "Wish List" adds value for our online users already knowing our products. As in a web shop, you can store the products you have chosen and make a request online. You then get a detailed offer via e-mail after your conditions have been carefully checked. There is no quicker and more convenient way to do it. If you wish consultation, you

will find a mail form under "Contacts" as well as a list of contact persons with their personal extension numbers. We are still extremely interested in the personal contact to our customers.

If you have placed an order, you can easily check online the status of your shipment sent via United Parcel Service (UPS) by means of the UPS shipment tracking.

We have also extended the category "Company". Here, you will not only find the most important figures about us, but you will also learn where we come from and where iba subsidiaries and sales partners are

our software and hardware, but also the latest versions of the iba software products. Furthermore, the order process is even more convenient for registered users: you can directly make an offer, your contact data, of course, is already known and entered into the form.

### There's more

With the relaunch of our Internet presence, we have done the first big step, but there are more to follow. First of all, the worldwide iba subsidiaries will be integrated in our new concept and their web presence will be adjusted in terms of tech-



You will find a wide range of services and information under www.iba-ag.com

located all over the world. Moreover, you will get to the latest dates, events and press news.

If you are already one of our customers, we will provide access to further areas containing useful information after registration. In the private area, you cannot only download the latest product manuals for

nology, content and design. Moreover, a schedule book including the scheduled training dates will be offered for you to easily register online. We are keeping the details to ourselves for now, but we still got lots of ideas how we can improve our service even more. Just click and have a look. By the way – our web team is always looking forward to your feedback.

# The ibaPADU-S family has grown



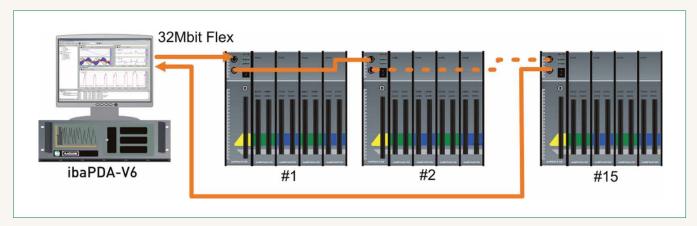
The ibaPADU-S family continues to grow. We have not only extended the range of input and output modules, but have also developed a new central unit: ibaPADU-S-CM is perfectly suitable for classic measurement applications and is a "lean" alternative to the intelligent CPU component ibaPADU-S-IT-16.

The big advantage of the ibaPADU-S system still is its great flexibility that

is achieved through the modular structure. For different applications, there are components for analog as well as digital inputs and outputs for current and voltage signals of different signal levels, but also SSI pulse encoders and counter modules.

The new central unit offers the possibility to select a classic I/O system "just" acquiring and recording signals or a more intelligent system that has to fulfill additional requirements as, for example, control and monitoring tasks or the intelligent processing of signals.

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Example for a ring connection of up to 15 stations with 32Mbit Flex

# ibaPADU-S-IT-16 as intelligent solution

Thanks to the integrated processor, different automation solutions can be realized with ibaPADU-S-IT-16 and the programming system ibaLogic. On the one hand, an ibaLogic control program can be loaded in ibaPADU-S-IT and work independently as offset control. On the other hand, ibaPADU-S-IT in connection with a superordinate automation system like ibaLogic can, for instance, be used as decentralized, quick on-site controller. Moreover, an intelligent ibaPADU-S-IT system can be perfectly integrated into a Condition Monitoring concept.

# ibaPADU-S-CM as communication unit

In connection with ibaPDA-V6, the central unit ibaPADU-S-CM is used for mere measurement applications as a usual parallel-analog-digital-unit (PADU). For all applications not requiring signal processing or having to fulfill control tasks, ibaPADU-S-CM is a cost-efficient alternative to ibaPADU-S-IT-16. The new central unit is now availabe.

Both central units support the iba protocol 32Mbit Flex. With 32Mbit Flex, the acquired data as well as the configuration data is bidirectionally transmitted via two FO cables. Compared to the former ibaNet, a LAN connection is not necessary. The signal acquisition with a sampling rate of up to 40 kHz is possible and variable for each modular system. Moreover, 32Mbit Flex offers the possibility to connect up to 15 modular systems to build a ring. If you use one of the previous ibaNet protocols, the central unit ibaPADU-S-IT is required.

### Automatic update

Both central units automatically recognize the plugged in modules and check the software version of the module. If the software version of the modules does not fit the version of the central station, it will automatically perform an upgrade and downgrade, respectively. This way, it is guaranteed that all modules always work with the same software status. This means for the user that there is no need for laborious update installations manually executed anymore.

### New I/O modules

In the following table, you will find an overview of the modules with their main properties. Newly added are the modules ibaMS4xAI-380VAC, an analog input module for high voltage, ibaMS16xAI-10V-HI, an analog input module particularly with high impedance and ibaMS16xAI-24V, which is also an analog input module for an input signal level of ±24 V.

# Application programming interface for OEM solutions

For qualified OEM partners, we also provide an application programming interface to integrate individual solutions on the ibaPADU-S-IT system. This is, for example, how the Austrian company logi.cals

	ibaPADU-S-IT	ibaPADU-S-CM
Sampling rate	max. 40 kHz	max. 40 kHz
Digital inputs	8	8
Automatic update	x	х
ibaLogic-V4 on board	х	-
32Mbit Flex	х	х
Previous ibaNet protocols	х	-
Configuration via FO	х	х
Free signal selection	x	х
Web interface	х	-

The most important properties by comparison

implemented their run-time system for the logi.cad system on the ibaPADU-S-IT. With this OEM solution, functions specially tailored to the application in the Condition Monitoring can be realized with the help of the logi.guard library.

Input modules		
ibaMS3xAI-1A/100A	3-channel analog module for 1 A AC/100 A DC	
ibaMS4xAI-380VAC	4-channel analog module for 380 V AC	
ibaMS8xAI-110VAC	8-channel analog module for 110 V AC	
ibaMS16xAI-10V	16-channel analog module for ±10 V	
ibaMS16xAI-10V-HI	16-channel analog module for ±10 V (high impedance)	
ibaMS16xAI-24V	16-channel analog module for ±24 V	
ibaMS16xAl-20mA	16-channel analog module for ±20 mA	
ibaMS16xDI-220V	16-channel digital module for 220 V	
ibaMS16xDI-24V	16-channel digital module for 24 V	
ibaMS32xDI-24V	32-channel digital module for 24 V	
Output modules		
ibaMS16xAO-10V	16-channel analog module for ±10 V	
ibaMS16xA0-20mA	16-channel analog module for ±20 mA	
ibaMS16xD0-2A	16-channel digital module for 2 A	
Special modules		
ibaMS4xUC0	4-channel module with counter	
ibaMS8xICP	8-channel analog module for ICP sensor	



# Innovations at ibaPDA-V6 and ibaAnalyzer

### ibaPDA-V6 (6.26.1 - 6.27.0)

**ibaBM-DPM-S:** With the bus module, it is now possible to read at two redundant Profibus lines in the Sniffer mode. Just insert the redundant Profibus cables into the port 0 and 1 of the device. The device recognizes which strand is the active one due to the status of the Profibus participant.

**Hardware support:** The ibaPADU-S modules ibaMS16xAI10V-HI, ibaMS16xAI-24V and ibaMS4xAI-380VAC as well as the new devices ibaBM-SiLink and ibaBM-eCAT are now being supported by the I/O manager.

**SIMATIC S7-/PCS7-H:** The address book generator now also supports controls of the SIMATIC ...-H type. Hence, ibaPDA-V6 can read the symbolic addresses of an H control.

**Modbus:** What's new is a TCP/IP Modbus client interface. This is why you can now actively request data from a Modbus server. The interface can be used for the protocols Modbus TCP and Modbus Serial for serial gateways.

**Allen-Bradley:** The AB Ethernet interface has been extended. The use of the control SLC-500 is possible and with PLC-5, telegram lenghts > 126 words are supported.

**32 bit Integer:** Data in the 32 bit Integer format will not be converted to float values anymore when saving to the data file or HD recording. Thus, the bit assignment for all 32 bits is maintained ensuring the use as

status word and the following evaluation as single bits in ibaAnalyzer.

For this purpose, ibaAnalyzer V 5.21.0 or higher is required.

**New functions:** There are new functions available in the expression builder:

- TextCompare to compare static and dynamic texts (via Technostring)
- GenerateSignal to generate different test signals (sine, cosine, triangle, rectangle, coincidence)
- GetSystemTime to read the system time (also partly)
- CameraStatus to request the camera status

**Managing layouts:** By means of a new dialog, layouts can be added, copied and deleted and the list box with the layouts can be formatted.

**Data storage:** When storing data, profiles for non-equidistant data can now be defined, too. Thus, the data storing can be better adjusted to discontinuous processes and a variable data creation, respectively.

### ibaAnalyzer (5.20.1 - 5.21.4)

**Double precision:** Data in the format Int32 as well as double precision are being read. Calculations are also performed with double precisions if the input data is double precision or Int32 type.

**Frequency based data:** Reading frequency based data from the data file is being supported.

**Non-equidistant data:** Reading non-equidistant data from the data file is being supported. Such file data can be generated from version 6.27.0 onwards with ibaPDA-V6.

**TDMS:** Extracting data into the TDMS file format (NI) is being supported.

File tree: The arrangement of several data files in the signal tree window (linked together and/or parallel) can be interactively exported and imported. When exporting the file tree, a text file (\*.txt) will be generated which can also be downloaded by means of the switch /filetree:conf.txt when starting ibaAnalyzer using the command line execution. Thus, ibaAnalyzer can be started through a combination of data files being linked together and parallel which was not possible up to this point.

**Tool bar:** Further buttons can be added to the tool bar for the following functions:

- Getting an analysis from a data base
- Storing an analysis from a data base
- Displaying a preview of a report
- Printing a report

### New functions:

- MakeVector for generating multidimensional signals (vector)
- VectorPercentile for calculating the percentile over the rows of a vector siqnal

**ibaAnalyzer-DB:** PostgreSQL data bases are supported.

# Listening on the ABB DDCS bus



With the device ibaBM-DDCS, we add a compact sniffer for ABB DDCS bus signals, as they are used in drives from ABB, to our range of bus modules. The device can passively co-write control signals as well as actively request status values from the drives.

# Reading control data

ABB controls use different channels to exchange information with the drives or request parameters: the data set channel and the parameter

channel. The bus monitor ibaBM-DDCS offers several optical interfaces for every channel. In the data set channel, control data is being exchanged between control and drive. By doing so, up to 8 drives can communicate with the control via a branching unit (NDBU-95).

The ABB control data is being addressed by means of data sets whereby every in-

dex stands for a particular data. The sniffer ibaBM-DDCS is also connected to the NDBU-95 and passively co-reads the data of all connected drives that are being requested from the control.

### Actively request service data

Apart from the data sets, further service data can be requested at the service point of the controls (Ch3-Port). Via this socalled parameter channel, ibaBM-DDCS can actively request and record the favored data or text information.

Therefore, the sniffer is being connected to the master interface of a NDBU-95 and has access to all data of the connected drives. If only one drive exists, ibaBM-DDCS will be directly connected to the service point of the drive.

Continued on page 5





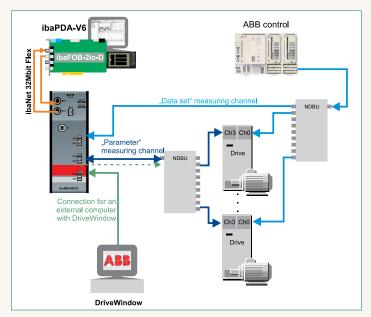
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# Interface for the configuration computer

Via the third optical interface, a configuration computer with DriveWindows software can be connected. In ibaBM-DDCS. the communication between the DriveWindows computer and the drives is being looped through the parameter channel. This means: if the DriveWindows computer is active, the service data is not being requested in the parameter channel. The communication of the configuration computer and the drives has priority at all times. If the DriveWindows computer is not active, ibaBM-DDCS can record data in the parameter channel. The co-writing of the signals in the data set channel is not affected.

# Selecting the signal by a mouse-click

Selecting the signals to be measured is quite comfortable in ibaPDA-V6, as the system configuration is automatically being recognized. Every drive is being displayed as an individual node with all avai-



ibaBM-DDCS in the ABB environment

lable signals. The signals can be selected in the data set channel as well as in the parameter channel by just a mouse-click. In this process, 512 analog and 512 digital signals per millisecond can be acquired and recorded.

With bigger system configurations, up to 15 devices can be interconnected in a ring structure. The overall number of the signals is limited to 512 analog and 512 digital signals due to the fiber optic cable.

## Third international sales conference

The worldwide distribution of iba products requires being present at the final customer site giving advice and providing our service. This is also very important for our internationally operating OEM customers.

In order to be able to offer a worldwide homogeneous appearance and excellent

service, it requires communication, confidence and mutual understanding within



From left to right.

Front row: Mayday Yoon (Korea); Sven Hein (Germany)
Middle row: Scott Bouchillon (USA); S.H. Lee (Korea); Shradda Patel (India)
Back row: Zhu Xiaowei (China); Eric di Luzio (Panama); Roeland Struye (Belgium);
Janelle Thornton (Australia); Craig Harrison (Australia); Wang Yanping (China)
Front, far right: Ulrich Lettau (Germany); Mario Gansen (Germany)

a global team. With this mindset, the third international sales conference of the iba group took place from 26 to 28 September 2011.

This time, ibaAmerica located in Alpharetta, a suburb of Atlanta (GA), acted as host. Apart from the chairman of the iba AG, representatives of all iba sales offices from four continents (ibaAmerica, ibaAsia, ibaBenelux, ibaChina, ibaKorea, ibaLAT, ibaOceania and ibaTurkey) participated in the conference.

After a report of every subsidiary and the headquarters concerning the state of the market and the sales strategy in the particular sales area, the roll-out of the new iba Internet presence was extensively discussed. This is based on the iba AG website that can be customized via a content management system to the local requirements in terms of language and content.

A full day was dedicated to the presentation of the new products as well as the innovations still being developed. In the course of this, different customer demands from different markets were intensively discussed and added to the development planning.

At the end of the successful conference, all participants agreed: the big effort for this event has been worth it once again.





# Cooperations

### iba in the far North



The iba AG adds a new partner in Sweden to its international sales network. Begner Agenturer based in Falun serves customers in Scandinavia providing them not only with iba products, but also offering a complete service including project management and technical support.

Begner Agenturer AB represents leading European manufacturers of machines and systems for the metal industry in Scandinavia. The know-how concerning the production processes of steel, aluminum and



copper makes Begner Agenturer a strong partner when it comes to achieving excellent production and material quality in the metal production. Yet, also in the paper and wood industry, Begner is already represented with measuring instruments and is thus expected to quickly distribute the iba technology.

iba measuring technology and automation systems perfectly fit into the portfolio of our Swedish partner. With Begner Agenturer, we have found a competent partner with a highly motivated team to place our technology on the market in the North of Europe.

Patrik Andersson, CEO at Begner Agenturer, receives the certificate as official ibasales partner from Dr. Ulrich Lettau, CEO of the iba AG, in front of the subsidiary in Falun

# New application examples

### The suitable solution for every application - go and see for yourself.

Automation, process monitoring, quality reporting, condition monitoring, modernization – these are the functional categories of our application examples. You find suitable solutions for several projects summarized in our new brochure, which is available at www.iba-ag.com under the headline "Applications". The projects in detail:

- Automation of video monitored fire test simulations
  - A complete solution with iba-Software
- The automation of a tandem group in a rolling section mill
  - Automation with ibaLogic
- Data capture in a test bench for diesel drive systems
  - Integrated operator concept with ibaQPanel
- Optimization of a non-online capable legacy system
  - ibaLogic as a Co-Processor
- Equipment monitoring of medium hot strip mill
  - Database for maintenance and quality control with ibaPDA
- System monitoring in a paper production facility
  - Process data acquisition with ibaPDA
- Plant monitoring of hot strip production
   Sniffing on the Profibus
- Process analysis in plants for tube manufacturing

Capturing and analyzing process data with iba measuring systems

- The integration of a new thickness gauge in a legacy system ibaLogic as a signal manager
- Optimizing the hydraulic actuator on a ships drive
  - CAN-Bus Sniffer
- Finding and correcting malfunctions in the hot rolling mill
  - Process analysis with ibaCapture-CAM
- Monitoring of over stage machinery functions on an opera stage Signal capturing with PADUs
- Transient Fault Recording in HVDC systems
  - Transient Fault Recording
- Length related data acquisition in strip processing lines
  - Quality data recording with ibaQDR
- Optimization of wind energy systems
   Condition Monitoring
- Optimization of an exhaust air treatment adsorber system
   Revamping with Soft-SPS
- Gradually modernizing automation systems

Soft-Revamp with ibaLogic



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### **EINblick**

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