



# EIBAnalyzer

The recording device for EIB diagnostics without a connected PC  
(recorded data will be stored on a standard USB memory stick)



## Highlights

- Recording of EIB-telegrams without PC
- No bus manipulation during recording
- Incl. 1 GB USB-Stick
- EIBDoktor software included

## Fields of application

Sometimes a customer is reporting frequent failures in his EIB installation. But of course the problem only occurs occasionally, one or two times each month. Now it would be very helpful to record all data of the EIB bus, and to analyze the data after the customer has reported a failure.

You can do that with the EIB-Analyzer, without leaving a complete PC for the logging at your customer's place. Simply install the DIN-rail mountable analyzer device, plug in an USB stick, and let it run. After the problem occurred, unplug the stick, and use the included EIBDoktor software to check out what exactly had happened on the EIB.

## Contents of delivery

- EIBAnalyzer DIN-rail mounted
- 1 GB USB flash memory stick
- EIBDoktor software
- Documentation

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# EIB-ASCII-Terminal

Accessing the EIB using an easy ASCII protocol by the RS232 interface



## Highlights

- Easiest access to the EIB
- Standard-ASCII-Code
- Supports all 32767 group addresses simultaneously
- Supports all non-structured EIS-types
- Simple setup using a terminal program
- Built in german and english help texts
- Fully transparent even at 100% bus load
- Built in filter- and EIS-type tables
- All values read- and writeable using plain text
- Simple integration of the EIB into own systems (PC, uC, Linux...)
- Built in bus coupling unit
- Standard-RS232-Interface, no system drivers required
- Small housing (67\*92\*26mm)

## Fields of application

If you simply need to write values to certain addresses to your EIB, and/or to know the current value of addresses, you do not need to use a complex protocol any more. You just send easy ASCII commands to the EIB-AT, for example the ASCII text sequence "W1/2/3=1" will write the value "1" to the group address "1/2/3". That's all you have to do! Therefore you can easily connect your own applications and systems to the EIB world without MS Windows, you just have to be able to handle a RS232 interface.

## Contents of delivery

- EIB-ASCII-Terminal
- Cable set
- Parametrization software
- Documentation

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# EIBDoktor

The ultimate diagnostic tool for the EIB/KNX system



## Overview

The „EIBWeiche“ device in combination with the MS-Windows software „EIBDoctor“ is an easy-to-use but powerful installation tool you should not miss while doing your EIB installations. The software shows each bus telegram, even disturbances on the bus are getting displayed. Function keys F1-F12 can be programmed with any EIB-Telegramms to simulate missing EIB-sensors, so you can easily test your EIB-installation. Powerful statistics are helpful to find bottlenecks in big installations, and device failures can be found by a simple mouse click.

The serial RS232 version of the EIBWeiche works with Windows 9X, Windows NT, Windows 2000, Windows XP and Vista x86/x64. The USB version requires Windows 2000, Windows XP or Vista x86. The power for the EIBWeiche is supplied directly from the PC, so the EIBWeiche needs no main plug. The EIBWeiche devices can also be used for programming with ETS2 and ETS3.

ETS2/ETS3 databases are supported to import data type-informations and to display the ETS address comments.

The „EIBDoctor Profi IP“ package additionally has the option to record the network telegrams of connected EIB-IP Routers/LAN Gateways.

## Fields of application

- Commissioning of a new EIB installation
- Analyzing an existing EIB installation
- Programming/searching/reading of EIB devices
- Parametrizing special EIB Gateways/EIB devices without ETS

## Contents of delivery

- Software EIBDoktor
- Hardware EIBWeiche with serial cable and 9pin connector or USB-cable
- Users manual
- Free updateservice on our homepage
- EIBDoktor Profi IP: serial code to enable LAN monitoring
- Additional vizualisation software

## Highlights

- Simultaneous diagnostics of local EIB and EIB-LAN telegrams while using IP-routers
- Logging all EIB-Telegrams (also non-EIS and fragmented bustelegrams)
- Busmonitoring is done even while sending telegrams!
- Displaying the complete group address range (main group 0 – 31)
- Shows all data in human readable form
- Easy to use
- Fragmented bustelegrams are related to actual telegram source (sending device)
- Long time logging (over months or even years) possible
- Filtered or unfiltered display (e.g. filtered by group addresses, physical addresses, times)
- Collision detection
- Permanently refreshed statistics ( bargraph) of number of telegrams to detect bus load sources
- number of repeats to detect telegrams without ACK
- number of errors (e.g. NACK, BUSY, collision)
- number of telegrams based on physical addresses
- Permanently reordering of bargraph display (descending from left to right)
- Useful functions like easy reset of all device-programming buttons, or a "search device" window.
- Measuring of real bit times to detect wiring errors
- Function keys can be used to send bus telegrams or complex telegram lists
- Sending telegrams can be related to various EIS-Types
- You can read, write and edit bus devices
- All bus devices can be reprogrammed to ACK-devices
- EIBDoctor includes EIBWeiche, the open serial or USB-interface
- Owners manual is printed directly onto the backside of EIBWeiche
- No external power supply required
- USB-Version supports ETS2 and ETS3
- Additional software included: ActiveX, EIB.VB, ASCII, OPC-Server and FIAVis visualization

## EIBDoktor professional USB

- EIB-diagnostic- and reconstruction tool with BCU-Editor
- Incl. EIBWeiche USB in compact case incl. cable set
- replaces the serial buscoupler and serial interface by using the ETS2 1.1b - 1.3b and ETS3
- Incl. object based OPC-Server

- Incl. EIB-Visualization EIBCP (lokal, 16Bit)
- Incl. EIB-Visualization FIAVis (lokal, 32Bit, 500PPs)
- Incl. file based ASCII-interface
- Incl. EIB.VB, ActiveX and DLL
- (contains same software as EIBWeiche visualization USB bundle but with EIBDoktor)

## EIBDoktor professional serial

- EIB-diagnostic- and reconstruction tool with BCU-Editor
- Incl. EIBWeiche serial in compact case with open serial protocol OPENEIB and protocol Standard BIM 1.0 (ETS)
- Incl. cable set and PS2 5V-adapter
- Replaces the serial buscoupler and serial interface by using the ETS2 1.1b - 1.3b and ETS3

- Incl. object based OPC-Server
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## EIBDoktor professional IP USB

- EIB-diagnostic- and reconstruction tool with BCU-Editor
- Diagnostic of local EIB-telegrams and LAN tunneled telegrams (over IP-router) at the same time
- Incl. EIBWeiche USB in compact case incl. cable set
- Replaces the serial buscoupler and serial interface by using the ETS2 1.1b - 1.3b and ETS3

- Incl. object based OPC-Server
- Incl. EIB-Visualization EIBCP (lokal, 16Bit)
- Incl. EIB-Visualization FIAVis (lokal, 32Bit, 500PPs)
- Incl. file based ASCII-interface
- Incl. EIB.VB, ActiveX and DLL
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# EIB-IR-Control

Handle your EIB by a modern infrared remote controller



## Highlights

- One infrared-remote control for TV, Video, Sat and the complete EIB
- Supports all EIB-telegrams (also non-EIS)
- Switch, Dimm, Temperature Control, Shutter, Central Functions, Scene
- Grafic user interface
- Realistic displayed rooms (ground plan)
- Easy integration of EIB into own Systems
- 1 IR-controller supports up to 8 IR-sensormoduls
- IR-receiver in Artcase with integrated buscoupler for configuring the remote control no ETS is required

## Using the EIB-IR-Control

- Replacing conventional remote controls
- Controlling the complete EIB
- Controlling lights and technic units in lecture halls direct by the lecturer
- Controlling the EIB independently of wall-mounted push buttons
- Replacement for EIB-panels
- Replacement for rows of push-buttons
- Individual controlling of rooms with partitions

## Parts of delivery (EIB IR Sensor)

- 1 EIB IR Sensor

## Parts of delivery (EIB IR-sensor in Artcase)

- 1 EIB IR-Sensor in artcase with integrated buscoupler (no power supply required)
- 1 software set for parametric

## Parts of delivery (EIB IR Controller)

- 1 EIB IR controller (DIN-rail-mounting) with integrated 230V power supply
- 1 software set for parametric

## Parts of delivery (remote control)

(to buy in electronic supermarkets)

- 1 graphic remote control (Philips Pronto).  
The following versions are supported: RU890, RU940 and RU970 (colour) as well as Pronto NG devices (i.e. RU950).
- 1 software set for parameterization

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# EIB-MBUS-Gateway

Connecting MBus meters to the EIB world



## Highlights

- Connecting directly to EIB (2-wire)
- Usable in all EIB-Worlds
- Reading and writing of all EIB-Telegrams (even non-EIS)
- Reading of actual energie values
- Rirect reading of consumption meter values
- Reading of temperatures in flow pipes (forward and reverse temperature)
- Up to 16 measuring values per MBus gateway
- Up to 8 MBus-meters per gateway stackable
- MBus gateway is an MBus-master
- Cyclic reading (adjustable)
- Easy integration of MBus in EIB-systems
- Easy parameterization with EIBDoktor
- DIN-rail-mounting device (9TE)
- Power supply (230V) integrated

## Using the EIB-MBus-Gateway

The Gateway will be placed between the MBus lines and the two-wire EIB system. Using an EIBDoktor it can get parametrized to read values from the connected MBus-energie meters, and to send them to group addresses on the EIB system. Therefore all actual consumption values, temperatures in flow pipes (forward and reverse temperature), and other meter values are known in the connected EIB world, and can get be used there.

## Contents of delivery

- EIB-MBus-Gateway
- Documentation

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# EIB-MT-Gateway-IP

Accessing the EIB with AMX/Crestron/other mediatechnic controllers



## Highlights

- Simple access to the EIB
- Standard-ASCII-Code
- Supports all 32767 group addresses simultaneously
- Supports all EIS-types
- Simple setup using a terminal program
- Built in German and English help texts
- Fully transparent even at 100% bus load
- Built in filter- and EIS-type tables
- All values read and writeable using plain text
- Simple integration of the EIB into own systems (PC, Microcontroller...)
- Built in bus coupling unit
- Integrated mains adapter (110-230V)
- LAN-Interface, no system drivers required
- DIN-rail mounted 9TE = 156mm for top hat rail mounting

## Fields of application

The mediatechnic gateway IP is basically an EIBWeiche Ascii-Terminal device in a DIN-rail mounting case. It comes with example programs for AMX mediacontrollers, but the easy LAN handling of the gateway makes it simple to adapt other media controllers as well: although the EIB-Mediatechnic-Gateway-IP contains a large instruction set, usually three command sequences will suffice:

Write a value to a group address: "W groupaddress = value", f.e. "W1/2/3=1"

Request a value from a group address: "R groupaddress", f.e. "R1/2/3"

Listening to group address telegrams: a "Physical address > group address=value" sequence will be send from the gateway to the LAN when a telegram is detected. For example, if the device "2.3.4" is sending the value "1" to the group address "3/2/1", you will receive a "02.03.04>03/0/001=1" sequence. You can even let the gateway filter the incoming data, or tell the gateway that you want to use specific data formats.

## Contents of delivery

- EIB-Mediatechnic-Gateway-IP
- Parametrization software b+bTerminal
- Documentation

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# EIB-SPS

The central programmable logic controller with integrated LAN gateway.



## Highlights

- Including OPC-Server, ActiveX, DLL, Visu (FIAVis, Control Panel)
- Direct connecting on EIB (two wire)
- Direct ETS2 and ETS3 -database import of group addresses/object infos. No extra files required
- The EIB SPS continuously keeps track of all data changes on the bus
- No delay- or initialization times for visualization-systems due to bus data retrieval, the visualisation-system is served at LAN speed (100MBit/s)
- Visualization-systems start up with actual values within seconds-rather than minutes or hours when using a standard serial interface
- Coupling of any EIB-World to Intranet/Internet by the common network protocol TCP/IP
- DIN-rail-mounting
- Firmware updates via network possible
- Direct coupling to Facility Management Systems using the OPC mechanism
- Up to 8 visualization system connections can be used at the same time
- All groupaddresses are permanently monitored and stored into an internal process item list
- Full read/write access to group addresses
- Central functions are fully supported through emulation of the actuator objects
- No server PC required, the EIB-SPS is an EIB server in the network
- Explicit polling of the actual values of group addresses possible
- Group addresses may be preset to distinct values
- Configuration is done via network.
- Integrated 230V-power supply
- Easy graphical programming of complex logics using the included software
- More than 100 ready to use function blocks for logic operations, time programs, regulation, climatic functions, Email, SMS and much much more

## Fields of application

The EIB-SPS is the central intelligence for the EIB. The device can work without a PC, and will execute its programmable logic reliable. The programming software comes with over 100 ready to use function blocks, it is even possible to write your own blocks by a C-alike script language. Therefore the realisation of nearly every complex function with the EIB is possible. You can test your logics offline, without EIBSPS, on your PC, and download them by the LAN connection to the EIB-SPS.

The EIB-SPS comes with drivers for visualization systems, and even an OPCServer is included in delivery, so you can use the EIB-SPS as a fast LAN-to-EIB connection for you visualization/GLT system. The LAN connector can also be used for remote controlling the EIB by an ISDN router.

## Interfaces

- TCP/IP (protocol specification freely available) ▪ 32 bit DLL ▪ ActiveX ▪ OPC

## Package contents

- EIB-SPS ▪ Software for programming the EIB-SPS (Microsoft Windows 95/98/NT/2000/XP/Vista x86)
- OPC-Server, ActiveX, DLL, Visualization (free 500 license of FIAVis included) ▪ Documentation

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# EIBWeiche

The universal connection between your PC and the EIB by USB or RS232



## Highlights

- Reading and writing of all EIB-Telegrams (even non-EIS)
- Reading and writing of physical telegrams
- No communication break down on bus voltage dropouts
- Operating instructions directly printed onto bottom side of the EIB-Weiche
- Easy integration into proprietary systems
- Sample programs in several program languages included
- RS232: fast telegram transmission (up to 38kbaud serial to PC)
- USB: very fast telegram transmission, drivers for Win2000, XP, Vista x86
- The EIBWeiche can automatically check and acknowledge EIB-telegrams!
- Deliverable with OPC, ActiveX, EIB.VB, DLL and visualization
- Including cable-set

## Fields of application

The EIBWeiche is a fast and stable bus coupling device between PC and the EIB two wire bus system. It is available for RS232 and USB, in both cases the device is powered by the PC, and not by the bus system itself. It can be used as a programming adaptor for ETS2 1.1b-1.3 and ETS3, the EIBWeiche USB is the only direct USB coupling device in the world which can be handled from the ETS2 software!

The EIBWeiche technology has been developed with the demands of visualization systems in mind (fast bi-directional communication, receiving and sending data at the same time), and it comes with all kind of drivers and interfaces for visualization and GLT systems.

The specifications of the PC <-> EIBWeiche communication protocol „OpenEIB“ is public available, and can be freely used in own applications. Therefore it is also the perfect choice to connect your custom microcontroller to the EIB.

## Package contents:

- EIBWeiche with cable set
- ETS2 drivers (for use with the USB EIBWeiche)
- Program examples
- OPC, EIB.VB, ActiveX, DLL, Visualization (bundle version)

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# enocean-EIB-Gateway

Connect your wireless enocean sensors to the EIB world



## Highlights

- Connects battery-less RFsensors to the EIB, no additional wiring needed
- Expands the EIB with wireless sensors
- Graceful designed housing
- Supports all enocean-sensors (buttons, window contacts, temperature...)
- Easy integration into existing EIB systems
- supports switching, dimming, temperature adjust, shutters, central functions...
- contains RF-receiver and integrated EIB-bus-coupler
- no ETS required to parametrize the device
- up to 50 enocean devices are supported with one gateway, with max. 256 group addresses

## Fields of application

As sensors may be used buttons (e.g. from PEHA or Omnio), temperaturesensors (e.g. from Thermokon), glass break detectors and many more. Those sensors do not need a battery, the needed energy is generated by pressing the button or by solarcells. The enocean-EIB-gateway allows switching, dimming, shutters, temperature and brightness-measurement.

Therefore you can expand your EIB without additional wiring, or use enocean buttons/switches in buildings with movable walls or in historical buildings where no additional wiring is allowed. The enocean push buttons are even mountable on glass surfaces!

The gateway will receive the RF signals, and send them as EIB telegrams (using the correct EIS types for switching, temperature, dimming, etc) to the EIB world.

## Contents of delivery

- enocean-EIB-gateway with integrated EIB-Buscoupler
- software for parametrization (EIBDoktor recommended)
- Documentation

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# enocean-IP-Gateway

RF-receiver and gateway to LAN



## Highlights

- Connects battery-less RFsensors to the PC network (LAN) no additional wiring needed
- Supports all enocean-Sensoren (Buttons, Windowcontacts, Temperature...)
- Easy integration into own applications by using the direct ASCII protocol
- OPCServer included
- contains RF-receiver and integrated LAN connector

## Overview

As sensors may be used buttons (e.g. from PEHA or Omnio), temperaturesensors (e.g. from Thermokon), glass break detectors and many more. Those sensors dont need a battery, the needed energy is generated by pressing the button or by solarcells. The enocean-IP-gateway allows switching, dimmimg, shutters, temperature and brightness-measurement over the PC network (LAN), with the included OPCServer the integration of the Enocean values into your visualization software becomes easy.

## Fields of application

- Expansion without additional wiring
- Use in historical buildings where no additional wiring is allowed
- Use in buildings with moveable walls
- Functions independent of fix mounted pushbuttons
- Individual controlling of rooms with removeable walls
- Pushbuttons mountable even on Glass surfaces

## Contents of delivery

- 1 enocean-IP Gateway
- OPCServer software
- Documentation

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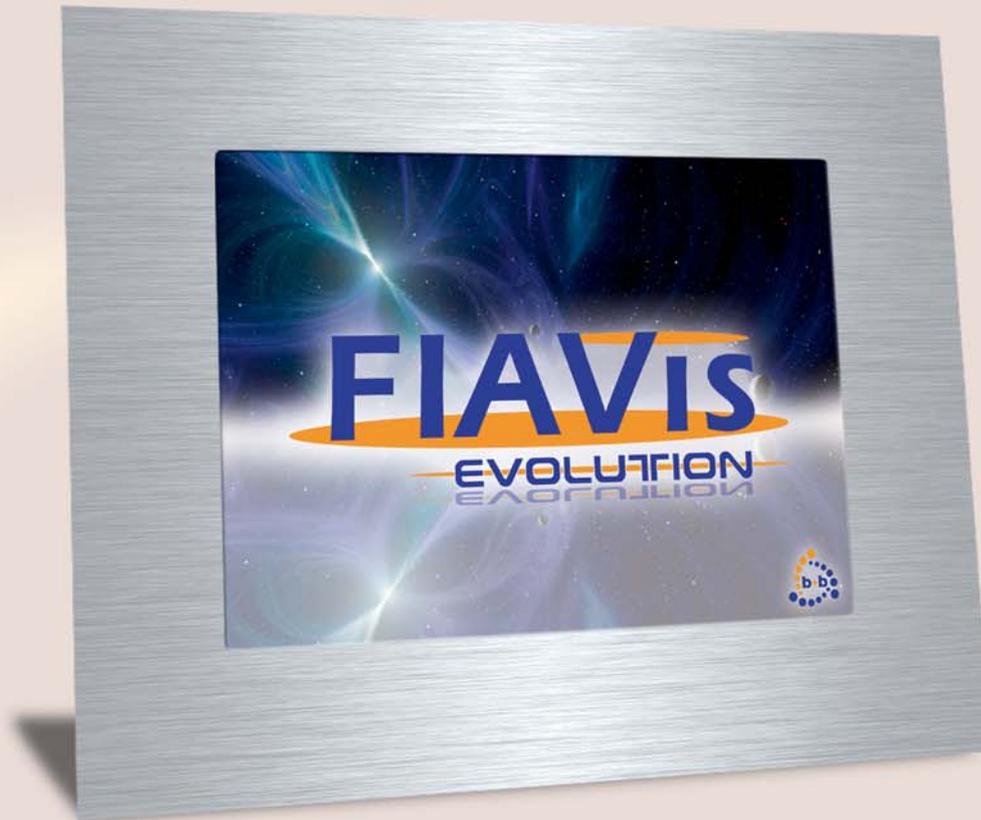
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# FIAVIS Evolution



## Hardware Highlights

- Touch Panel with integrated FIAVIS system
- Operating system: Windows XP embedded
- Size: 10,4" / 15"
- Many different front panel designs available
- Optional chassis for easy wall mounting
- Free usable ports: USB, LAN, RS232, VGA
- Internal EIB two-wire coupling device (EIBWeiche)
- Highly reliable: no fans, no movable parts, Flash memory with file security

## Function Highlights

- Unlimited FIAVIS system, all available FIAVIS options are included
- Creating visualizations directly on the Touch Panel or on a separate PC (does not need EIB connection), the projects can be easily transferred by LAN
- Integrated Web server, no HTML programming knowledge needed, the visualization web sites are automatically created by the FIAVIS Designer software
- Graphical logic programming (compatible with EIBSPS logics): time functions, temperature regulation, scenes, logic operations...
- Routing functionality for exchanging values between different lines or even different worlds with address translation
- FIAVIS Base Server: unlimited number of network clients for accessing the EIB/KNX, no special runtime licenses needed
- High speed EIB connection with the integrated EIBWeiche coupling device, additional coupling per LAN (EIBSPS or Siemens/ABB IP Router) and USB/RS232 is possible
- Connection to other bus systems with the build-in OPC client
- Connection to other visualization/GLT systems with the included OPC Server
- Easy access for your own applications by LAN with simple ASCII commands
- Number of usable addresses not limited

## Fields of application

The FIAVis Evolution System offers a modern Touch Panel PC with integrated EIB/KNX coupling device. The innovative design offers an easy wall mounting and high reliability. The pre-installed FIAVis system (configuration tools, visualization, web server) is immediately ready to use. Big projects can be created and tested comfortably on separate PCs, and transferred to the Touch Panel PC by LAN by just pushing a button.

FIAVis Evolution is not only a local touch control panel with integrated Soft-PLC. It is also a central data pool server for the fast EIB access by LAN for other PCs. The client PCs can use their own FIAVis Commander visualization or simply an Internet browser to connect to the Evolution system. No need for any HTML programming: the FIAVis Designer will create the web sites, using modern AJAX technique, automatically. It is even possible to connect to the Evolution system with other GLTs/visualization packages, using either OPC or an open network protocol.

The FIAVis Evolution system is using Windows XP embedded as operating system. Therefore, you can easily install and use additional software applications as well. The system integrity stays always intact due to the internal file security mechanism.

## Package contents

- FIAVis Evolution Touch Panel PC with integrated EIBWeiche coupling device
- Pre-installed Windows XP embedded, Web Server, FIAVis software
- CD with software and documentation
- Optional: Designer front panel
- Optional: Wall mounting chassis

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# FIAVis

The ultimate visualization solution for EIB systems



## Highlights

- Visualization of systems with 500/unlimited number of process items: each EIBSPS and EIBWeiche comes with a free 500 license of FIAVis!
- Visualization over network, number of network clients is not limited
- Simulation mode for testing functionality without attached bus systems
- Automation of systems with timings, regulations, scenes... free graphically programmable Soft-SPS/Soft-PLC is included
- Integrated value logging
- Integrated router (exchange of values between different EIB worlds)
- Included OPCServer
- Included ActiveX interface
- Included WEB interface (MS IIS needed)
- Included visualization designer with unlimited runtimes
- Supports EIBWeiche, EIBSPS, Siemens/ABB IP Router (optional), OPC Servers to other bus systems (optional)

## Overview

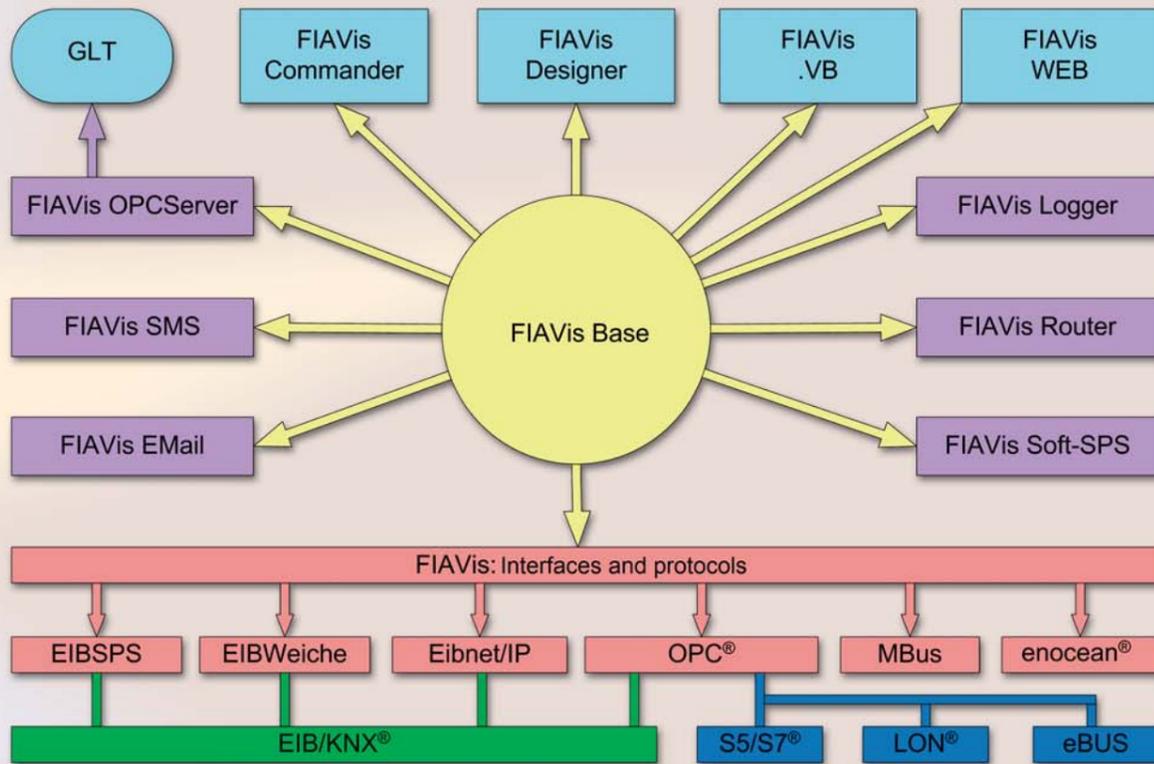
FIAVis is a new visualization solution which is included in (but not limited to) our EIBWeiche and EIB-SPS packages. FIAVis has a central data pool which is running as a Windows Service (2000/XP/Vista x86), this data pool holds all current values of all parametrized addresses from the connected bus systems.

External applications (visualization/GLT systems) can access this data pool by the included OPCServer / ActiveX / WEB interfaces, but of course FIAVis comes also with its own visualization software, the FIAVis Commander. You can create as many Commander runtime projects as you like, with no additional license fees, so for example you can easily create individual panels for each user in a big building, each panel can connect to the central data pool by LAN.

The central data pool can also act as a value monitor (storing values into database files for statistics), as a router (to connect two different worlds), and as a soft-PLC (Soft-SPS) to execute programmable logic functions/time functions. Beside the EIBWeiche and EIBSPS the data pool also supports Siemens/ABB IP Router as an EIB connection (optional, need a special license) and even completely different bus systems can be connected to the data pool, using the OPC interface (also an optional license is required).

## FIAVis Base

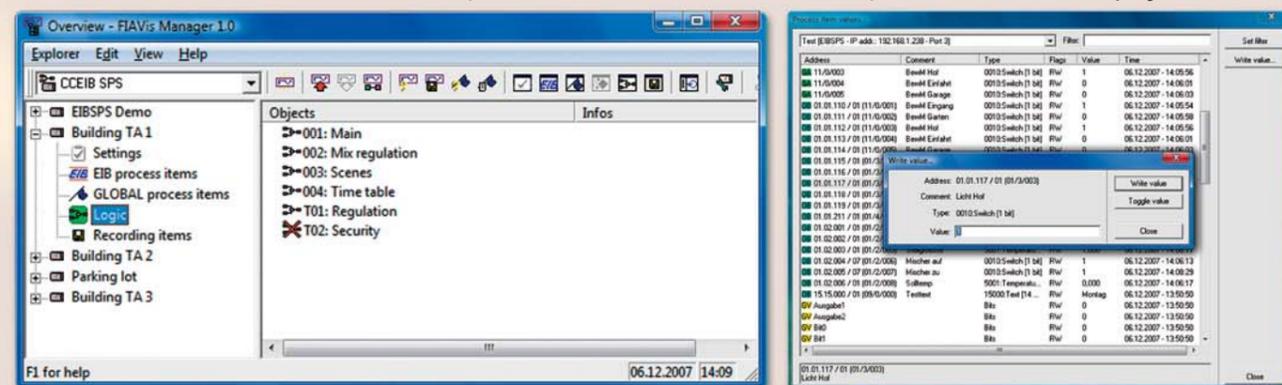
The central data pool of FIAVis is a real Windows service (MS Windows NT4, MS Windows 2000, MS Windows XP, MS Vista X86), which works without the requirement of a logged-in Windows user. It directly supports the following EIB access methods: EIBSPS, EIBNET/IP network router, EIBWeiche serial and EIBWeiche USB (EIBWeiche USB only with MS Windows2000, -XP, Vista X86). Additionally the OPCClient functionality allows access to arbitrary other bus systems and data sources. Even the concurrent administration of multiple EIB plants is possible.



The FIAVis Base data pool service provides an internal Soft-PLC, a logging module, routing functionality, and a simulation mode (for creating and testing your projects without actual bus access). Client-PCs are able to access the data pool by network, without local bus connection, you can use/administrate/parametrize the data pool by a remote connection.

## FIABase Manager

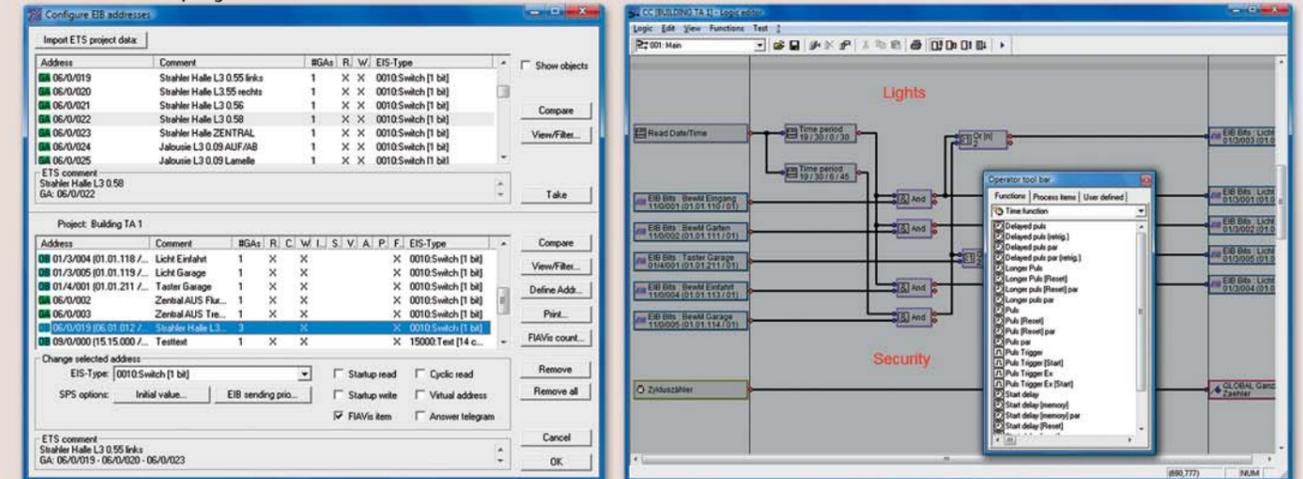
The FIAVis Manager is the parametrization tool for FIAVis Base. It is used to define the process items of the data pool (address import from ETS2 and ETS3 is integrated), and for creating logics for the Soft-PLC. Here you also manage the logging and routing functionality, and the way of the bus access. Furthermore FIAVis Manager contains status indicators of FIAVis Base (incl. the current license information), and windows to display/write the



FIABase Manager

Quick Access to process items

current process item values (fast access to the process items without the need of creating a complete visualization). The FIAVis Manager is able to import older EIB Explorer projects, so you can use your existing EIBSPS and Control Panel projects with FIAVis as well.

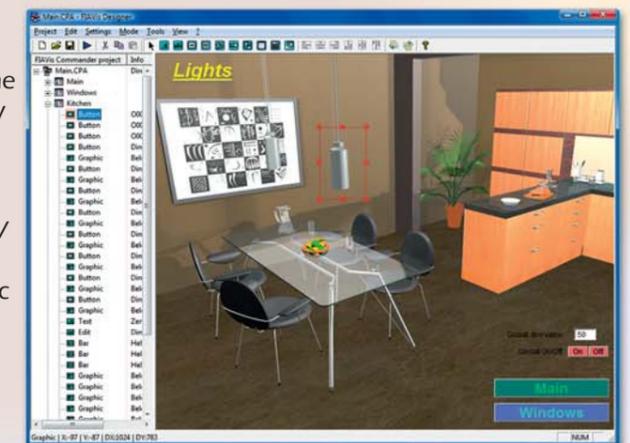


Import EIB Addresses

Logic editor

## FIABase Commander / Designer / Web

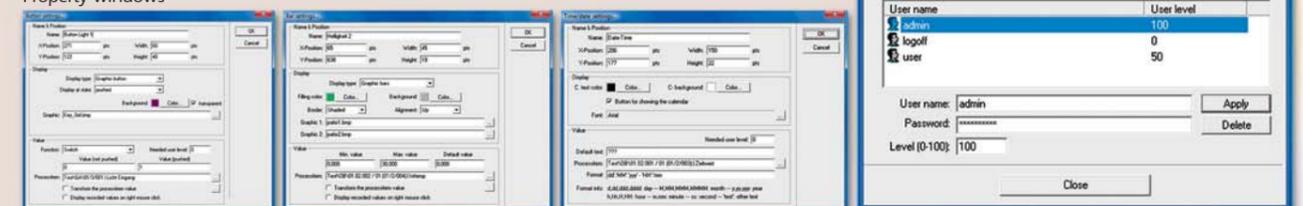
This is the visualization software of the FIAVis package. The visualization GUI gets created with the fully graphical Designer software, which automatically creates the runtime executable (the FIAVis Commander). The runtime directory is just to be copied to the target computer and can be used immediately. Of course you can create as many runtimes as you like, each project can contain arbitrary display pages and control elements. The following display/control elements are available: Text fields, input fields, switches, pushbuttons, scrollbars, bar line displays, graphic fields, page changers, time tables, html views (including web cams) and calendars. These have many adjustment possibilities (arbitrary colors, character fonts, graphic images (available formats are BMP, JPG, GIF, WMF, TIF, PCX – transparency is possible with all formats). Process item values may be scaled/mapped before they are displayed. The internal user management lets you define users with special privileges. External applications can be launched by pressing a button received process item value, e.g. start of outlook with a button, or start of an SMS-application when an alarm message arrives.



FIABase Designer

And as an highlight you can turn your Commander project into Webserver HTML/AJAX pages by a simple mouse click, the Microsoft IIS Web Server can be used to host the project for an unlimited number of clients. Additionally it is possible to import existing EIB Control Panel projects into a FIAVis Commander project, all EIBCP functions remain unchanged.

### Property windows

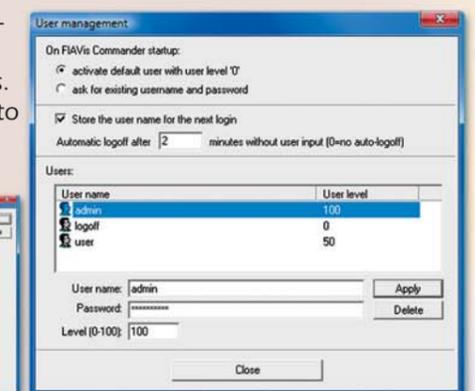


Button settings

Bar settings

Time/date settings

User manager



## FIAVIS OPCServer / FIAVIS.VB

External OPC clients (visualizations/BMS) are able to access the FIAVIS Base data pool using the provided FIAVIS OPCServer. There are no additional parametrization efforts needed, all FIAVIS Base process items are automatically available via OPC.

For those OPCclients lacking a „browse“ function it is possible to create a textfile containing all OPCServer process item names, which allows creating the process items within the client.

FIAVIS.VB is an ActiveX interface for usage within own programs respectively in programs supporting ActiveX (e.g. MS-Excel, MS-Access, VB, DotNet). This interface allows easy read/write access to the process items. There are no additional parametrization efforts needed, all FIAVIS Base process items are automatically available the .VB module. Contained are commands to read and write process items, furthermore you can install an event handler which is called upon value changes.

Tag	Info	Value	Time
Test\GA\11/0/1	BewM Eingang	1	12/06/07 14:44:24
Test\GA\11/0/2	BewM Garten	0	12/06/07 14:44:24
Test\GA\11/0/3	BewM Hof	1	12/06/07 14:44:24
Test\GA\11/0/4	BewM Einfahrt	0	12/06/07 14:44:24
Test\GA\11/0/5	BewM Garage	0	12/06/07 14:44:24
Test\OB\1.1.110/1	BewM Eingang	1	12/06/07 14:44:24
Test\OB\1.1.111/1	BewM Garten	0	12/06/07 14:44:24
Test\OB\1.1.112/1	BewM Hof	1	12/06/07 14:44:24
Test\OB\1.1.113/1	BewM Einfahrt	0	12/06/07 14:44:24
Test\OB\1.1.114/1	BewM Garage	0	12/06/07 14:44:24
Test\OB\1.1.115/1	Licht Eingang	0	12/06/07 14:44:24
Test\OB\1.1.116/1	Licht Garten	1	12/06/07 14:44:24
Test\OB\1.1.117/1	Licht Hof	1	12/06/07 14:44:24
Test\OB\1.1.118/1	Licht Einfahrt	0	12/06/07 14:44:24
Test\OB\1.1.119/1	Licht Garage	1	12/06/07 14:44:24
Test\OB\1.1.211/1	Taster Garage	1	12/06/07 14:44:24
Test\OB\1.2.1/1	Zeitwert	33.000000	12/06/07 14:44:24
Test\OB\1.2.2/1	Isttemp	12.300000	12/06/07 14:44:24
Test\OB\1.2.3/1	Stellgroesse	1.000000	12/06/07 14:44:24
Test\OB\1.2.4/1	Mischer auf	1	12/06/07 14:44:24
Test\OB\1.2.5/1	Mischer zu	1	12/06/07 14:45:17
Test\OB\1.2.6/1	Solltemp	0.000000	12/06/07 14:44:24
Test\OB\1.5.0/1	Montag	Montag	12/06/07 14:44:24
Test\GV\Ausgabe1		0	12/06/07 14:44:24
Test\GV\Ausgabe2		0	12/06/07 14:44:24
Test\GV\Ausgabe3		0	12/06/07 14:44:24

FIAVIS OPCServer

```

' Write four values on Button press
Private Sub ButtonWrite_Click()
    Dim strConn As String, strType As String, strAddr As String, strValue As String
    If fConnected = False Then Exit Sub
    For i = 5 To 8 Step 1
        strConn = Worksheets(1).Cells(i, 1).Value
        strType = Worksheets(1).Cells(i, 2).Value
        strAddr = Worksheets(1).Cells(i, 3).Value
        strValue = Worksheets(1).Cells(i, 4).Value
        FIAVIS.Value(strConn, strType, strAddr) = strValue
    Next i
End Sub

' Event handler, automatically called when a
' new value arrives
Private Sub FIAVIS_NewValue(ByVal strConn As String, ByVal strType As String, ByVal strValue As String)
    For i = 5 To 8 Step 1
        ' check, if we want to know this value
    
```

FIAVIS.VB example code

FIAVIS.Connect()	Activates the connection to the data pool
FIAVIS.Disconnect()	Closes the connection to the data pool
Status=FIAVIS.ConnectionState	Returns informations about the current connection
FIAVIS.Value("process item")="value"	Writes a value to a process item
value=FIAVIS.Value("process item")	Reads a process item value from the data pool
Event FIAVIS.NewValue(address,value)	Optional event handler, will be called on value change

## Contents of delivery

- The complete FIAVIS software is included on our EIBTools CD which comes with all of our EIB products. Even without an EIB-SPS/EIBWeiche device you can install and evaluate the software.
- Each EIB-SPS and all non-REG EIBWeiche devices have a free „500 process items“ license included
- The optional licenses (unlimited process items, IP Router support, OPC-Client) come with an USB hardlock dongle to activate the complying functionality
- Documentation

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# KNX-GSM-Gateway

EIB/KNX remote control and alarming with a mobile phone



## Highlights

- Bi-directional EIB/KNX GSM communication via short messages (SMS)
- Quadband GSM support for worldwide use
- Only additional SIM card required, no other hardware is needed
- Integrated EIB/KNX bus coupling unit with two wire EIB/KNX connector
- Integrated real time clock
- Writing values to all 32767 group addresses by SMS
- Up to 100 event messages can be set to up to 8 receivers
- A receiver can be:
  - \*mobile phone, \*telephone, \*fax, \*e-mail address
- Eight event time ranges are possible, time synchronisation via EIB-DCF
- Access control for protection against unauthorized access to your EIB/KNX installation:
  - phone number filter
  - password protection for commands via SMS
  - group address filter
- Alarm input
- Automatic log in to the GSM network after power failure
- Alarming on sabotage, bus voltage loss, bus voltage return
- Routine event message every X hours for monitoring the gateway ("Alive SMS")
- Event message when starting the gateway ("BootUp SMS")
- Easy configuration using the EIBDoktor software

## Introduction

The KNX-GSM Gateway offers a bi-directional communication between the EIB/KNX and the GSM network via short messages (SMS). This allows you to remote control and monitor your EIB/KNX installation with a mobile phone. Every authorized user can read from/write to EIB/KNX group addresses via mobile phone, if these addresses are unlocked in the KNX-GSM Gateway. Furthermore, the KNX-GSM Gateway provides the opportunity to send short messages to one or more receivers if certain events (e.g. "Temperature > x°C") occur. This can be used to inform the user about interferences.

The KNX-GSM Gateway supports the widespread mobile phone standard GSM. This is why it can be used in almost any place.

(\*: network provider dependent)



## Fields of application

- Remote control your EIB/KNX-installation via mobile phone over GSM network
- Monitor your EIB/KNX-installation via mobile phone over GSM network

## GSM Standards

The KNX-GSM Gateway was developed for operating in four different GSM frequency bands:

- 900MHz (mainly used in Europe)
- 1800MHz (mainly used in Europe)
- 850MHz (mainly used in USA)
- 1900MHz (mainly used in USA)

The KNX-GSM Gateway supports all current GSM standards because it uses GSM Quadband technology.

**Important:** You have to ensure that your GSM network provider supports the short message service and that this service is activated for your account!

## SIM cards

A SIM card from a GSM network provider is needed for communication in the GSM network. This SIM card identifies the user in the GSM network. The KNX-GSM Gateway supports 1,8V and 3V mini SIM cards.

## GSM antenna

Every GSM antenna with SMA connector (male) can be used with the KNX-GSM Gateway. You only have to ensure that the used antenna supports the frequency band used by your GSM network provider.

**Note:** The included antenna is a Dualband antenna which supports operation in the frequency bands 900MHz and 1800MHz. If you plan to use the KNX-GSM Gateway in the frequency band 850MHz or 1900MHz you have to provide an extra antenna which supports these frequency bands.

## Technical data

Dimensions:	(W x H x D) (mm) 156 x 86 x 59
Power supply:	230V AC
Current consumption:	5VA
Temperature range:	0°C – 50°C (in operation)
Degree of protection:	IP40 (frontside, after installation)
Casing:	DIN-rail mounted, 9TE
GSM standard:	Quadband GSM (GSM 900, GSM 1800, GSM 850, GSM 1900)
GSM antenna:	5dBi antenna, Dualband GSM (GSM 900, GSM 1800), magnetic base, SMA connector (male)

## Contents of delivery

- KNX-GSM Gateway
- Dualband GSM antenna (supports GSM frequency bands 900MHz and 1800MHz)
- EIBDoktor software for configuration
- Documentation

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# KNXGuard

The invisible guardian for your EIB installation.



## Highlights

- Protects your EIB system from unwanted programming access
- Alarming
- Can be used as an ACK device
- No physical address needed

## The different KNXGuard types:

To program a bus device, a point-to-point connection has to get established (physical telegrams), to „open“ the device and send the physical programming telegrams.

### KNXGuard type "Highest security"

The „Highest security“ KNXGuard will prevent any physical telegrams on the EIB. That way it is impossible to change anything in any device.

### KNXGuard type "High security"

Some physical telegrams will be allowed on the bus: the reading telegrams. Therefore devices can get read or polled, but still no physical write-telegrams are possible.

### KNXGuard type "User defined"

It is having the same functionality as the „High security“ device, but you can activate/deactivate this type of KNXGuard by sending special telegrams (using the EIBDoktor). The telegrams will be send to the broadcast address 15/7/255, inside the telegram is the serial number of the KNXGuard and a special security code, using an RSA algorithm: even if somebody else is able to protocol the telegrams to deactivate the KNXGuard, sending them later will be useless, since the telegrams are only correct at a special time. Trying to send the deactivation telegram on a later time will have no effect at all.

## Requirements for all KNXGuard devices:

You have to install an KNXGuard into every line you want to protect: security on the „backbone“ will not grant security in lower lines most times.

**Alarming:** You can define an „Alarming group address“, the KNXGuard will send a telegram to this address each time somebody is trying to do an illegal access. This telegram can be used to display a warning inside a visualization software, for example.

**ACK functionality:** The KNXGuard also acts as an „ACK device“, which means that it will acknowledge all groupaddress-telegrams, and prevents unnecessary busload this way. This will not affect the function of the EIB, damaged telegrams will still get repeated.

**No physical address:** The KNXGuard acts as an „invisible“ device, it will not get used inside the ETS project. The ETS is also not able to detect the KNXGuard. Therefore the KNXGuard does not need a physical address.

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