

BITBUS - the international fieldbus

- Wall mount unit for easy deployment across the factory floor
- PoE option: No need for local power supply
- IP65 ruggedized for industrial/outdoor use -40..+50°C ambient
- Spring cage terminals for BITBUS and i/o accept a wide range of solid an stranded wire
- CAT5 LSA terminal for ETHERNET takes solid installation cable as well as patch cable
- RS485 BITBUS port: 62.5 kBit/s, 375 kBit/s or 1.5MBit/s
- Full BITBUS message length
- Known state BITBUS line end termination
- 10/100MBit Ethernet node
- 32bit ARM7 with 2MByte Flash and 512kByte backed-up RAM
- Large configuration EEPROM
- RS232 interface with spring cage terminals
- **Software**
- BAPI server on the gateway works with up to 16 applications on one client or scattered over your LAN.
- BAPI.DLLs of existing IPC-BIT900 drivers can be exchanged for BAPI.DLLs that call the BAPI server - hence:
- **No application software changes necessary from BIT900s!**
- Convenient access to gateway-local i/o through nodeAccess™ DLL
- 3 integrated web servers for configuration and custom application pages
- **Optional Process I/O:**
- 4 digital inputs 24V, optoisolated
- 2 make relay outputs 3A@24VDC/48VAC
- 2 changeover relay outputs 6A@24VDC/48VAC

The ETH-BIT 10/100MBit-Ethernet-to BITBUS gateway is an IP65 ruggedized surface box for indoor or outdoor use and works as master or slave. It can optionally be remote powered over the Ethernet cable by **Power-over-Ethernet - PoE**. The TCP/IP-Server follows a BEUG recommendation and allows a move to Ethernet that is transparent for your application: The BAPI-DLL for Windows® that we ship with ETH-BIT is compatible to our DLLs for the PC add-on-boards IPC-BIT900 and the USB-BIT USB-Gateway.

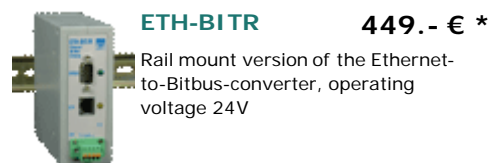
Instead of using a PC-add-on board for BITBUS access, now you can get to your BITBUS network over Ethernet, too. And you don't have to change your software if you have been using our IPC-BIT900-series of add-ons or our USB-BIT. Just overwrite the existing BAPI-DLL with our new BAPI-DLL that tunnels your BITBUS-request through TCP/IP to our ETH-BIT (or ETH-BIT/R or even TSM-ARMCPU!). We now have a "BAPI/TCP"-server running on our ARM-based hardware that makes a perfect BITBUS-master (or slave) down your Ethernet connection. It's a bit slower of course, as TCP/IP introduces a second level of message exchange: It will take about 9ms for sending a request to the master until getting a reply back in your application - compared to 1.5ms roundtrip time on a PCI board in a fast PC. But then there are numerous advantages like being able to move an application from one PC to another easily or to have multiple PCs working on the same Gateway. Most BITBUS applications won't even notice the difference.



To fit into a switchboard a rail mount version of the ETH-BIT is also available as ETH-BITR. It uses



Order codes:



ETH-BITR 449.- € *

Rail mount version of the Ethernet-to-Bitbus-converter, operating voltage 24V

ETH-BITR<POE 488.- € *

as above but with remote supply over ethernet cable

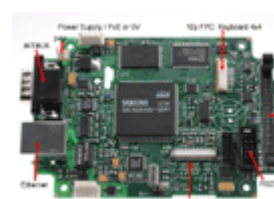


ETH-BIT 499.- € *

Wall mount box with Ethernet, BITBUS and one RS232 port. Local 24V DC supply required (apply to internal spring clamp terminals). Includes BAPI server software and remote Windows® 98SE, 2000, ME and XP client DLL (BAPINT.DLL).

ETH-BIT<POE 538.- € *

As above, but with isolated "Power-over-Ethernet" supply (IEEE802.3af) through the Ethernet cable. Provides 200mA* at 24V for external devices.
*) current derating with high temperatures

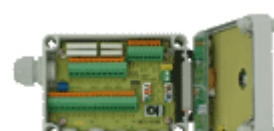


ETH-BITS 369.- € *

OEM version of the Ethernet-to-BITBUS gateway, board only. Needs 5V supply from 24VDC

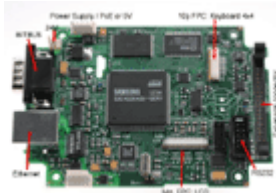
converter (NET-PS5 at 39€) or PoE supply (NET-PoE24/5 at 78€).

For your i/o requirements near the gateway:



ETH-BIT4I4R 539.- € *

the same processor board that works in the surface box, however there is no separate i/o-board with spring clamp terminals. Ethernet gets connected through a standard RJ45 connector and BITBUS is available at a DB9 male connector. The remote supply option with PoE is also available for this model.



A bare bones version is available for those wishing to embed a BITBUS master (or slave) into their own product.

The ETH-BITS stand-alone-board has a DB9 connector for BITBUS and RJ45 socket for Ethernet and a 10 pin header (flat cable compatible to DB9 IDC plug)

for the RS232 port. A bus expansion connector for own i/o extensions carries A0..A9, an 8 bit data bus and interrupts. No enclosure, supply 5V. There's a choice of 24VDC or PoE pluggable supplies. Includes BAPI server firmware and remote BAPI.DLLs for Windows® 98SE, 2000, ME and XP.



If you are in a web-centric environment, ETH-BIT allows you to present your BITBUS network as a set of web pages. The 3 built-in web servers talk "MSP" - active HTML pages with direct access to the mCAT real time kernel.

Your custom C-written task (easily downloaded into Flash) may do autonomous data gathering and distribution. The condensed results can be offered

through the web server or on a TCP/IP socket or through nodeAccess™ DLLs

Use your standard web design tool to produce a tree of pages for ETH-BIT: Then, hand those pages over to a utility that comes with the mCAT development environment. This will produce a hex file that can be sent to ETH-BIT's Flash Eeprom and will be shown after the next reset.

Ethernet/BITBUS-Gateway with 4 optoisolated 24V digital inputs and 4 relays (2 make, 2 c/o). Needs 24V local supply.

ETH-BIT414R<POE

578.- € *

as above, but with isolated "Power-over-Ethernet" supply (IEEE802.3af) through the Ethernet cable. Provides 200mA* at 24V for external devices. *) current derating with high temperatures

For i/o extension boxes as shown in the above picture or other i/o like temperature sensors etc. please call.

To provide power to the PoE fed units (order suffix <POE), we offer the following devices:

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ETH-NGFS108P

from 139.- € *

PoE-Switch zur Fernversorgung

- 3.14. [A TCP Server example](#)
- 3.15. [BITBUS Slave example](#)
- 4. [mCAT HTTPD Server examples](#)
 - 4.1. [A simple website example](#)
 - 4.2. [Classic CUI Interface example](#)
 - 4.3. [A simple mCAT Server Page](#)
 - 4.4. [A mCAT Server Page \(MSP\) u](#)
 - 4.5. [A complex mCAT Server Page](#)

SFT-MCAT2 200.- € *

Programming on ETH-BIT - for master tasks like data aggregation, alert management etc. or for slave tasks like communication with a local RS232 peripheral - is easy for those experienced in C. Our real-time-kernel "mCAT" provides all the mechanisms for process-i/o-access (express-i/o), serial line handling, inter-task-messaging etc. Present your data through a TCP/IP-socket, as variables through the nodeAccess™ mechanism or as HTML in-line call in mCAT's web server language MSP.

mCAT's plain development environment comes packed with the gnu-C-compiler for the ARM7 (without support), a task body generator, many examples and more than 400 pages of documentation. Of course the environment works with the commercial ARM compiler, too.

Included is half a year of e-mail support.

* all prices ex works (+VAT/MwSt inside Germany)