



## High-end products for data communication and Internet access technologies

FMN communications GmbH presents new developments

Nordhausen, 08<sup>th</sup> January 2007 – FMN communications GmbH presents innovative products for the multimedia-based communication on the basis of latest technologies like UMTS, ADSL2+, Wireless Sensor Networks, WLAN and IP telephony at this year's CeBIT in hall 16, stand C18.

The quadband-UMTS modem **alpha<sup>®</sup> UMTS WTM** makes the use of UMTS/ GPRS/ EDGE data services under extreme climatic conditions or at mobile applications possible.

HSDPA data rates up to 3.6 Mbps in the downlink and up to 384 Mbps in the uplink are possible. The modem is available as PCB in PC/104-Plus format as well as in an outdoor enclosure (protection class IP54). As PC/104-Plus module, it is also part of the UMTS version of the FMN outdoor router **alpha<sup>®</sup> route CUxx**.

Router or PPPoE modem can be chosen as operating mode of the modem. The configuration can easily be made over the integrated web interface. The modem is connected to the PC or to the network over standard Ethernet interfaces.

With the **DSL modem family alpha<sup>®</sup> DSL WTM**, the company from Nordhausen, Germany, has developed a solution which also makes wired broadband supply in ADSL technology under extreme temperatures in the outdoor area possible. The standards ADSL, ADSL2 and ADSL2+ are supported. With that, transfer rates up to 24 MBit/s (Downstream) and 1 MBit/s (Upstream) are reached. The layout concept makes the use in industry standard PC/104-Plus PCB systems as well as the use as single modem possible. Solutions for various field conditions (e. g. DIN top hat rail) and protection classes can be realized by means of separate housings.

The modem is available for ITU G 992.1 Annex A as well as for ITU G.992.1 Annex B (G.dmt 1TR112 (UR2)).

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The **router family alpha<sup>®</sup> route** of the FMN communications GmbH is an ultra compact module that is suitable for outdoor-use for the broadband supply in multimedia locations (e. g. public telephone stations, info terminals, WLAN-HotSpots) or other locations that are suitable for an area-wide Internet access. The modules that are required for that are housed in a sturdy casing:

- router (also remote configurable) with 4-Port-Ethernet Switch 10/100 Mbit/s for the distribution of the data to different applications (PC, Screen, VoIP/ Video-oIP, et. al.)
- optional WLAN access point (also WIMAX possible) for the wireless broadband supply
- optional quadband-UMTS modem for the use of UMTS / GPRS / EDGE data services
- optional DSL modem (ITU G992, Annex B, alternatively also Annex A for international use)
- optional SIP/ISDN adapter for VoIP applications of subsequent ISDN devices

The presented housing concept makes it possible to remove the waste heat that is caused by the function directly via the housing. Thereby, a protection class of IP54 is achieved.

The main modules are realized in the industry standard PC/104-Plus format and may therefore easily be adapted to other tasks and accommodations. The hardware and software concept that is used makes the application under the environmental conditions that are expected in the hard outdoor-use possible without any difficulties.

With the new **TVE800 family** for **IP-TV**, FMN also accepts the challenges of the multimedia age.

The products from the **TVE800 family** are the cost-saving alternative for the feeding of television programs into IP networks for hospitals, hotels, network operators, authorities and companies. The **TVE800S** or the **TVE800C** prepares the television programs and generates a digital data stream for the IP network.

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Eight optional DVB-S or DVB-C programs of the same or different satellite transponders can already be fed into the IP network by means of the base unit. The modular system permits variable extensions.

Functions like channel search and transmission of pay-TV programs as well as a clear channel selection are standard. The program supply can optionally be realized via Multicast or http. The MPEG2 data stream makes the storage of the data on a PC or on a Set-Top box with recorder function possible.

Wireless Sensor Networks become more and more important in logistics applications, cold chain monitoring, building automation as well as medical or military engineering. With the system components of the **Wireless Sensor Network**, such intelligent wireless sensor networks that are organizing themselves can be set up for various applications.

Different sensor modules in a small, compact design are available for this purpose. Actuators can also be connected to this sensor modules.

The data of the sensors and actuators are transmitted to the base module **alpha® WSN BM 110** by radio and may be transferred over a RS232 or a LAN interface here. Further base modules are available with WLAN and USB interface.

A brand-new software for **process visualization** and **MODBUS** connection is available.

By means of the WSN modules, ad-hoc networks can be set up without additional configuration effort. Different network topologies can be realized (point-to-point, point-to-multipoint, mesh network).

Repeater modules are available for the extension or improvement of ranges.

An intelligent power management and the use of the latest hardware components also make a mains-independent battery operation with extremely long battery lifetime possible.

Different parameters of a module (like e. g. sampling interval, min./ max. values) can be changed via the radio interface.

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The radio modules work on the license-free 868 MHz frequency and are available with internal antenna or with connection possibility for external antennas.

Furthermore, state-of-the-art **radio data modems** in compact and sturdy design, **radio sets for voice and data** as well as **light signaling receivers** are offered in the radio data product line of FMN.

High-quality products of telecommunications, like **payphones**, **ISDN** and **special telephones**, and services complete the offer of FMN.

You can get further information about FMN and its products in the Internet under <http://www.fmncom.com>. All press releases are available for download under [http://www.fmncom.com/presse/frame\\_presse.html](http://www.fmncom.com/presse/frame_presse.html).

Press contact:

FMN communications GmbH  
Andreas Goldschmidt, Wolfgang Koslowsky  
Grimmelallee 4  
99734 Nordhausen  
Germany  
Phone: +49 (36 31) 56-30 00  
Fax: +49 (36 31) 56-32 24  
Email: [marketing@fmn.de](mailto:marketing@fmn.de)  
Internet: [www.fmncom.com](http://www.fmncom.com)

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