



EBW 100-WLAN/HSPA



With the EBW100-WLAN/HSPA you can also easily visualize and manage application data via the Cumulocity Cloud and the Telekom “Cloud der Dinge”

WLAN industrial router with HSPA/GPRS for secure and easy networking

The EBW100-WLAN/HSPA is a high-quality dial-in/dial-out router with 2 LAN ports and port forwarding for remote maintenance and remote access to your application via WLAN or alternatively HSPA/GPRS.

Wireless connection and security through redundancy

The EBW100-WLAN/HSPA industrial high-speed router enables secure wireless connections between local networks via WLAN and to the internet via mobile networks (3G/HSPA, GPRS/EDGE). The HSPA interface creates the conditions for the implementation of remote access and maintenance. For example, the EBW100-WLAN/HSPA is ideal for safely reaching plants in remote networks.

The mobile radio interface serves as redundancy should a local WLAN network not be available. Data security is provided by a firewall and integrated VPN (OpenVPN, IPsec).

Safe and easy via VPN

The configuration is simple and intuitive via web interface. The combination of VPN and firewall offers maximum IT security. With the optional DELTA LOGIC Connectivity Service, you can quickly and easily set up your own VPN network. In a few steps you integrate PCs, routers and locally connected network devices.

Extensions for monitoring, alerting and cloud services

The Monitoring App allows you to extend the functionality of the devices by monitoring controls and other devices as well as sending messages via e-mail or SMS. Moreover, application data can be transferred quick and easy to cloud services like Cumulocity or Telekom “Cloud der Dinge” for central management and visualisation.

Technical highlights

- Router and switch in one device
- Compact design
- IT security: VPN, stateful firewall
- Integrated Linux programming environment (INSYS sandbox)
- 2-port switch with 10/100 MBit/s
- Monitoring App for monitoring Siemens LOGO!™, S7 and Modbus TCP devices available
- Management and visualisation of application data via Cumulocity Cloud and Telekom “Cloud der Dinge”
- Quick start for VPN service DELTA LOGIC Connectivity Service

EBW 100-WLAN/HSPA

Technical details

Router

Function	IPv4/IPv6 router, connection management, DHCP server and client, Full NAT (IP forwarding, port forwarding, netmapping), DNS relay, dynDNS support, PPPoE for ADSL modem via LAN (ext), dial-in, dial-out, callback
Security	OpenVPN (client and server), IPsec (ESP normal/aggressive mode), GRE, PPTP, stateful firewall and MAC filters, RADIUS authentication, 10 users for dial-in, authentication via PAP/CHAP/MS-CHAP/MS-CHAP 2, dial filter for dial-out, linkloss detection, failed login detection, no backdoor
Redundancy	LAN ext. port for external DSL modem, 2 dial-out targets, 2 OpenVPN servers
Connection stability	Connection monitoring on several levels, hardware watchdog
Frequency, transmitted power	2,4 GHz, max. 100 mW
SIM	1 slot for Mini-SIM card
Networks	2G: 850, 900, 1800, 1900 MHz; GSM/GPRS/EDGE Class 12 3G: 800, 850, 900, 1.900, 2.100 MHz; UMTS/HSPA 3GPP Release 6, 7 DL 14.4Mbps, UL 5.7Mbps
WiFi mode	WiFi client, WiFi access point with up to 5 clients
Security	WEP, WPA/WPA2 (AES, TKIP). 802.1X (EAP: TLS, TTLS, PEAP)
Antenna connection	Reverse SMA male for WiFi, SMA female for cellular radio

Operation

Configuration	Local and remote web interface (http, https), command line interface (CLI), Telnet, SSH, ASCII and binary file (also for backup), quick start for DELTA LOGIC Connectivity Service Menu languages: German, English, French
Indications (LEDs)	Connection status, data/signal, device status/VPN, power, switch ports
Diagnosis	Comprehensive log files, support package, integrated help functions, Diagnosis tools: ping, tcpdump, traceroute, DNS lookup
Customer-specific programming environment	User access to embedded Linux (sandbox), 150 MB permanent memory, socket access, example programs: e-mail and SMS client, serial logger, etc.
Messages	Hardware watchdog, system messages via e-mail, SMS, SNMP traps, SNMP V1/V2c/V3



Monitoring app for monitoring Siemens LOGO!™, S7 and Modbus TCP devices additionally usable. More information at:

www.deltalogic.de/produkte/fernwartung/monitoring-app

EBW 100-WLAN/HSPA



Create VPN connection easily and securely. With the DELTA LOGIC Connectivity Service.

<https://connectivity.deltalogic.de>

Additional features	NTP client and server, buffered real-time clock, optional monitoring packages
Updates	Update of firmware and configuration (local and remote), daily auto update via server (http, ftp)
Switch	
Ports	2x RJ45 10/100 BT for full and half duplex operation
Function	Automatic detection of patch cable/cross-over cable, automatic speed adjustment, port mirroring
Environmental conditions	
Power supply	10 ... 48 V DC (±20%)
Power consumption (during connection)	Approx. 2 W (logged in), max. 5.2 W (data transmission)
Operating temperature	-30...+60 °C -30...+75 °C under restricted conditions (refer to www.insys-icom.com/restricted)
Humidity	0...95% (non-condensing)
Mounting/protection class	DIN rail mounting/housing: IP40, terminals: IP20
Certifications	CE
Applied standards	Radiation: EN 55022 Class B, EN 61000-6-3 Interference resistance: EN 55024, EN 61000-6-2 Security: EN 60950-1
Applied radio standards	EN 300328, EN 300440-2, EN 301489-1, EN 301489-3, EN 301489-7, EN 301489-24, EN 301908-1, EN 301908-2
Standard	IEEE 802.11 b/g/n
Dimensions (WxHxD)	45 x 70 x 110 mm (2,6 HP)

EBW 100-WLAN/HSPA

Monitoring App (monitoring function)

Monitoring elements	Timer, incoming SMS, internal flags
Logical combination of the elements	AND, OR, NOR, NAND, XOR
Actions	Message dispatch, http call, timer start, upload to Cumulocity cloud, Telekom "Cloud der Dinge": Central and easy visualisation of measurements, events and alarms
Messages	SMS, e-mail: Freely configurable text, also actual values from monitored elements

