



# EBW100-LTE



With the EBW100-LTE you can also easily visualize and manage application data via the Cumulocity Cloud and the Telekom "Cloud der Dinge".

## Professional routers for secure and easy network connection

With the EBW100-LTE, you get a secure 4G/LTE router with VPN for mounting on a DIN rail. Ideal for data-intensive applications such as video surveillance.

### Router and switch in one device

The EBW100-LTE combines modem and router in one compact device. It enables internet connections via mobile networks (4G/LTE, 3G/UMTS/HSPA, 2G/GPRS/EDGE). Data security is ensured by a stateful firewall with MAC filters, integrated VPN (OpenVPN, IPsec) and other security features such as event-driven messages.

### Safe and easy via VPN

Configuration is accomplished via a simple and intuitive web interface. The combination of VPN and firewall provides a maximum of IT security. You'll set up your own VPN network quick and easy with the optional DELTA LOGIC Connectivity Service. PCs, routers and locally connected network devices can be integrated in just a few steps.

### 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

- LTE industrial router
- Router and switch in one device
- Compact design
- IT security: VPN, stateful firewall
- 2-port switch with 10/100 MBit/s
- Integrated Linux programming environment (INSYS sandbox)
- 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

# EBW100-LTE

## Technical details

### Router

<b>Function</b>	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
<b>Security</b>	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
<b>Redundancy</b>	LAN ext. port for external DSL modem, 2 dial-out targets, 2 OpenVPN servers
<b>Connection stability</b>	Connection monitoring on several levels, hardware watchdog

### Cellular radio (LTE)

<b>Networks</b>	2G/GPRS/EDGE: 900, 1.800 MHz; CSD, GPRS/EDGE Class 12 3G/UMTS/HSPA: 900, 1.800, 2.100 MHz; UMTS/HSPA 4G/LTE: 800, 900, 1.800, 2.100, 2.600 MHz; LTE Cat. 3 (DL: 100 Mbps, UL: 50 Mbps)
<b>Antenna connections</b>	SMA female for main antenna and SMA female for Rx Diversity (3G) or MIMO (LTE)
<b>SIM</b>	1 slot for Mini-SIM card (2FF), locked

### Operation

<b>Configuration</b>	Local and remote web interface (http, https), command line interface (CLI), Telnet, SSH, ASCII and binary file (also for backup), quick start for ICS Menu languages: German, English, French
<b>Indications (LEDs)</b>	Connection status, data/signal, device status/VPN, power, switch ports
<b>Diagnosis</b>	Comprehensive log files, support package, integrated help functions, Diagnosis tools: ping, tcpdump, traceroute, DNS lookup
<b>Customer-specific programming environment</b>	User access to embedded Linux (sandbox), 150 MB permanent memory, socket access, example programs: e-mail and SMS client, serial logger, etc.
<b>Messages</b>	Hardware watchdog, system messages via e-mail, SNMP traps, SNMP V1/V2c/V3
<b>Additional features</b>	NTP client and server, buffered real-time clock, optional monitoring packages
<b>Updates</b>	Update of firmware and configuration (local and remote), daily auto update via server (http, ftp)



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

[www.deltalogic.de/produkte/fernwartung/monitoring-app](http://www.deltalogic.de/produkte/fernwartung/monitoring-app)

# EBW 100-LTE



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

<https://connectivity.deltalogic.de>

## Switch

<b>Ports</b>	2x RJ45 10/100 BT for full and half duplex operation
<b>Function</b>	Automatic detection of patch cable/cross-over cable, automatic speed adjustment, port mirroring
<b>Environmental conditions</b>	
<b>Power supply</b>	10 ... 48 V DC (±20%)
<b>Power consumption (during connection)</b>	Approx. 2 W (logged in), max. 5 W (data transmission)
<b>Operating temperature</b>	-30...+60 °C -30...+75 °C under restricted conditions (refer to <a href="http://www.insysicom.com/restricted">www.insysicom.com/restricted</a> )
<b>Humidity</b>	0...95% (non-condensing)
<b>Mounting/protection class</b>	DIN rail mounting / housing: IP40, terminals: IP20
<b>Certifications</b>	CE
<b>Applied standards</b>	Radiation: EN 55022 Class B, EN 61000-6-3 Interference resistance: EN 55024, EN 61000-6-2 Security: EN 60950-1
<b>Applied radio standards</b>	EN 300440-2, EN 301489-1, EN 301489-3, EN 301489-7, EN 30189-24, EN 301511, EN 301908-1, EN 301908-2, EN 301908-13
<b>Dimensions (W x H x D)</b>	45 x 70 x 110 mm (2,6 HP)
<b>Monitoring App (monitoring function)</b>	
<b>Monitoring elements</b>	Timer, internal flags
<b>Logical combination of the elements</b>	AND, OR, NOR, NAND, XOR
<b>Actions</b>	Message dispatch, http call, timer start, upload to Cumulocity cloud, Telekom "Cloud der Dinge": Central and easy visualisation of measurements, events and alarms
<b>Messages</b>	SMS, e-mail: Freely configurable text, also actual values from monitored elements