

TK835L-EX0 – Industrial LTE Router

The new generation



4G

LTE with 100 Mbps

LTE standard for high transmission rates and good network coverage in sparsely populated areas



Extreme robust

High quality metal housing and -25 ° C to + 70 ° C operating temperature range for demanding and harsh environments

VPN

Dynamic Multipoint VPN

GRE, L2TP, IPSec, DMVPN, OpenVPN
Simple and fast configuration of thousands of routers thanks DMVPN



MIMO / Diversity

Two SMA (f) antenna connectors for better reception and low susceptibility to faults even with difficult conditions



Dual SIM

High availability with the use of SIM cards of two different network operators thanks to fallback



Command Line Interface

In addition to the web interface, the router can be configured through a lean command line

I/O

I/O support

A digital input and a relay output for connections to sensors and actuators (only for TK800 with additional EX)



Serial Interfaces

Each one RS-232 and RS-485 interface for connecting serial devices (only for TK800 with additional EX)



Five Ethernet Ports

Up to five RJ45 Ethernet ports. One of them as WAN port usable (Static IP, DHCP, PPPoE)



EMC

High electromagnetic compatibility according to 61000-4 for use in high-stress environments

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Technical Details

TK835L-EX0	
CELLULAR FEATURES	
Typ	LTE-Router
Chipsatz	Cinterion PLS8-US
2G Standard	EDGE/GPRS/GSM
3G Standard	UMTS (WCDMA)
4G Standard	LTE
Frequenz EDGE/GPRS/GSM	850/900/1800/1900 MHz
Frequenz UMTS (WCDMA)	1700/1900/2100 MHz
Frequenz FDD-LTE	700 (B17) / 850 (B5) / 1700 (B4) / 1900 (B2) MHz
Download (max)	100 Mbit/s
Upload (max)	50 Mbit/s
Authentication	CHAP/PAP/MS-CHAP/MS-CHAP2
Cellular antenna connector	2x SMA (f)
APN functions	APN (Access Point Name), VPDN (Virtual Private Dialup Network, IP VPN of the network operator)
Dial On Demand	Always online or dial, SMS or local data transfer
SMS functions	Reboot and status SMS
ETHERNET INTERFACE	
Connector	5x RJ45 port 10/100TX (1 of them WAN)
WAN-Port	1 Port
VLAN	dot1q
SERIAL INTERFACE	
Amount	2
Type	RS-232, RS-485
Serial interface	TXD, RXD, GND, A(RS-485+), B(RS-485-)
Connector	Terminal blocks 5-pin (m)
Baud rate	1200 - 115200 bps
Additional protocols	Transparent TCP, Virtual COM, Modbus TCP / RTU
ADDITIONAL INTERFACES	
Console port	1x RJ45 Console port (RS-232)
I/Os	1x Digital Input, 1x Relay Output
SIM card slot	2
SOFTWARE CHARACTERISTICS	
Configuration	Webbrowser, Telnet, SSH and Serial port
Updates	Webbrowser, Serial port, TFTP, FTP
ADVANCED FUNCTIONS	
Watchdog	Software and hardware watchdog
LED	LED indicators for the signal strength, 8 status LEDs: POWER, STATUS, WARN, ERROR, Modem, 2x SIM, VPN

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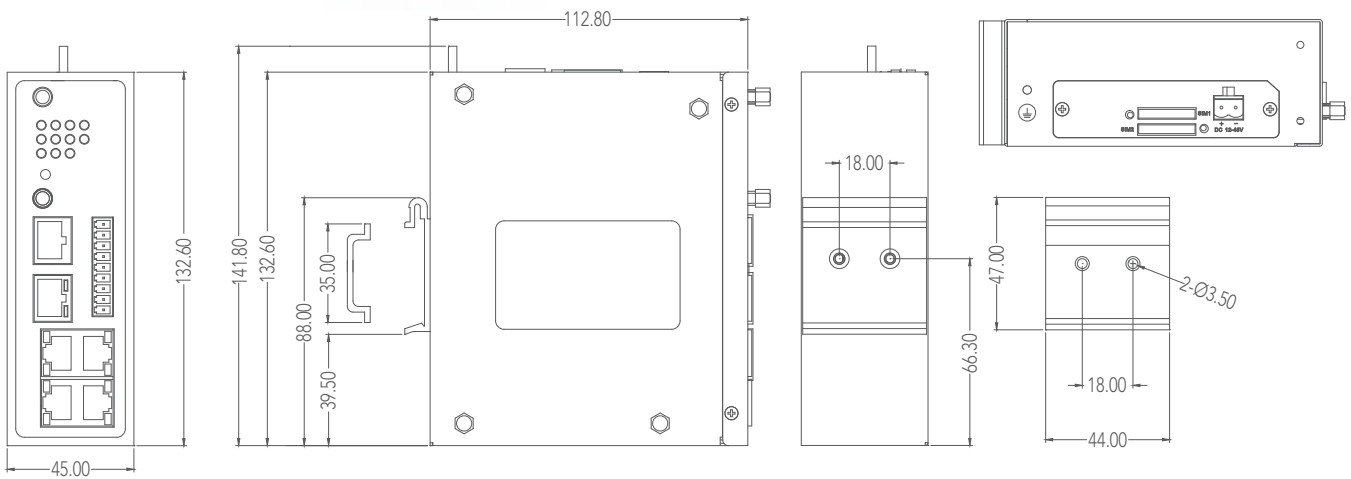
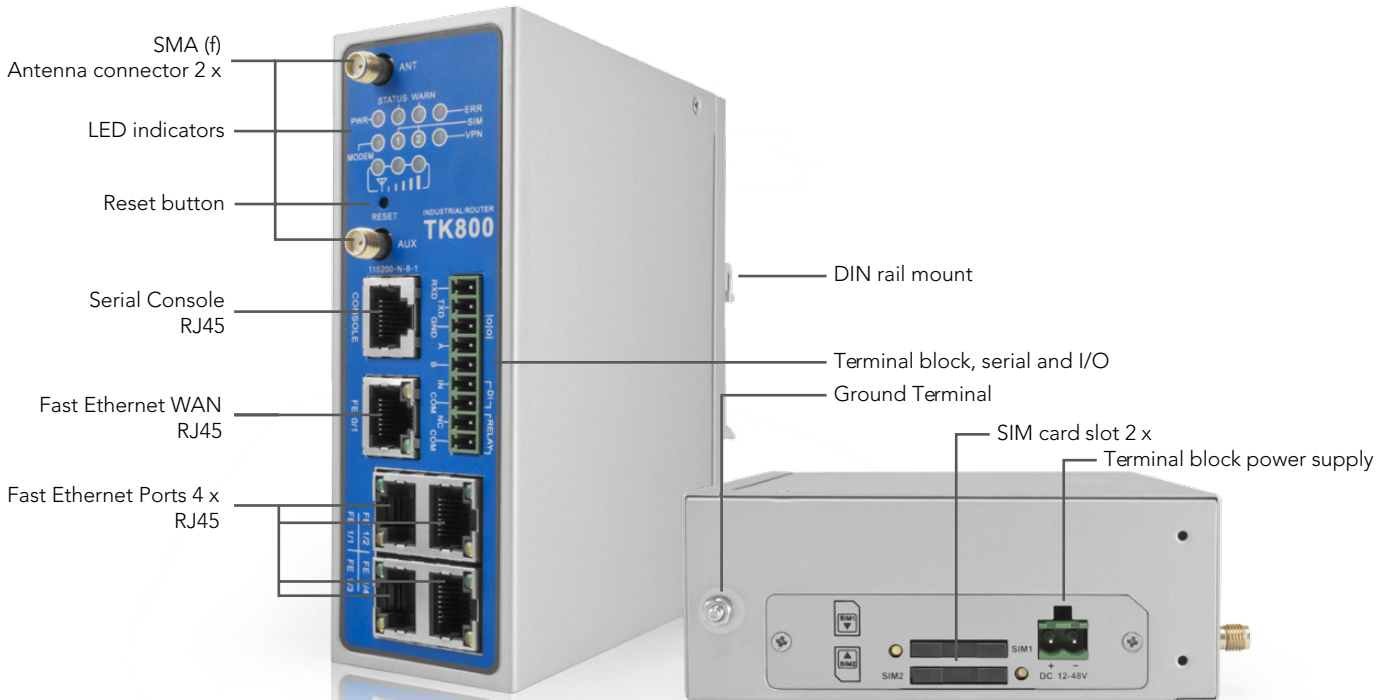
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NETWORK CHARACTERISTICS	
Routing	Static routes and dynamic routes with RIP or OSPF
Network protocols	ICMP, TCP, IP, UDP, DHCP, SNTP, DNS, HTTP, HTTPS, Telnet, ARP, VRRP, PPP, SSH
Connection inspection	PPP LCP echo and ICMP keep alive and IP SLA / tracking for checking connections
NAT and PAT	Network Address Translation (NAT) and Port Address Translation (PAT)
DDNS (DynDNS)	Supports Dynamic DNS
VRRP	Automatically switch to slave router if the master router fails
IPsec	Tunnel mode, Transport mode, DMVPN
OpenVPN	Client
GRE	Point-to-Point
VPN authentication	Preshared keys, digital certificates
Firewall	Stateful Packet Inspection (SPI), ACLs
Access control	ACLs, RADIUS, TACACS+, LDAP
Realtime clock	Provides the system with the current time (NTP)
POWER SUPPLY	
Power supply	12 - 48 V DC
Connector	Terminal blocks 2-pin (m)
Power consumption standby	3.8 W
Power consumption aktiv	5.3 W
PHYSICAL CHARACTERISTICS	
Housing material	Metal
Ingress protection	IP30
Dimensions (W x H x D)	45 x 132.6 x 112.8 mm
Weight	600 g
Mounting	DIN rail
ENVIRONMENTAL	
Operating temperature range	-25 - +70 °C
Storage temperature range	-40 - +85 °C
Humidity	5 - 90 %, non condensing
Shock	IEC 60068-2-27
Free fall	IEC 60068-2-31
Vibration	IEC 60068-2-6
EMC CHARACTERISTICS	
ESD	EN 61000-4-2, level 4
Surge protection	EN 61000-4-5, level 3
EFT	EN 61000-4-4, level 4
RF	EN 61000-4-3, level 4
RC	EN 61000-4-6, level 3
Oscillatory wave immunity	EN 61000-4-11, level 3
Variation magnetic field immunity	EN 61000-4-8, level 5

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Dimensions TK835L-EX0



Welotec is using a ISO 9001:2015 certified quality management system • All specifications are subject to change

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