

## TK800 Series – Industrial LTE Wi-Fi Routers

LTE Router and Wi-Fi Access Point in one device



### 4G

#### LTE with 100 Mbps

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



#### MIMO / Diversity

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



#### Dynamic Multipoint VPN

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



#### Command Line Interface

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



#### Dual SIM

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



#### Serial Interfaces

Each one RS-232 and RS-485 interface for connecting serial devices



#### I/O support

A digital input and a relay output for connections to sensors and actuators



#### EMC

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



#### Five Ethernet Ports

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



#### Wi-Fi Access Point and Client

The TK815L-EXW router has the WLAN standards IEEE 802.11 b/g/n and can be used as access point and client

## TK800 Series – Industrial LTE Wi-Fi Routers

## Technical Details

	TK805L-EXW	TK815L-EXW
<b>CELLULAR FEATURES</b>		
Type	LTE router	LTE router
Chipset	Huawei ME909	Cinterion PLS8-E
2G standard	GSM, GPRS	GSM, GPRS
3G standard	UMTS, HSDPA, HSUPA, HSPA+	UMTS, HSDPA, HSUPA, HSPA+
4G standard	LTE	LTE
Frequency GSM/GPRS	850/900/1800/1900 MHz	900/1800 MHz
Frequency UMTS	850/900/1800/1900/2100 MHz	900/1800/2100 MHz
Frequency LTE	800 / 1800 / 2600 MHz	800/900/1800/2100/2600 MHz
Download (max)	100 Mbps	100 Mbps
Upload (max)	50 Mbps	50 Mbps
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	
<b>WI-FI CHARACTERISTICS</b>		
Wi-Fi antenna connector	2x RP SMA (f)	
IEEE 802.11b	11 Mbps	
IEEE 802.11g	54 Mbps	
IEEE 802.11n	150 Mbps	
IEEE 802.11i	WPA/WPA2/TKIP/PSK/AES/CCMP	
WEP	64-bit / 128-bit encryption	
Access point mode	Yes	
Client mode	Yes	
<b>ETHERNET INTERFACE</b>		
Connector	5x RJ45 port 10/100TX (1 of them WAN)	
WAN-Port	1 Port	
VLAN	dot1q	
<b>SERIAL INTERFACE</b>		
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	
<b>ADDITIONAL INTERFACES</b>		
Console port	1x RJ45 Console port (RS-232)	
I/Os	1x Digital Input, 1x Relay Output	
SIM card slot	2	

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<b>SOFTWARE CHARACTERISTICS</b>		
Configuration	Webbrowser, Telnet, SSH and Serial port	
Updates	Webbrowser, Serial port, TFTP, FTP	
<b>ADVANCED FUNCTIONS</b>		
Watchdog	Software and hardware watchdog	
LED	LED indicators for the signal strength, 9 status LEDs: POWER, STATUS, WARN, ERROR, Modem, 2x SIM, VPN, WLAN	
<b>NETWORK CHARACTERISTICS</b>		
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)	
<b>POWER SUPPLY</b>		
Power supply	12 - 48 V DC	
Connector	Terminal blocks 2-pin (m)	
Power consumption standby	3.8 W	
Power consumption aktiv	5.3 W	
<b>PHYSICAL CHARACTERISTICS</b>		
Housing material	Metal	
Ingress protection	IP30	
Dimensions (W x H x D)	45 x 132,6 x 112,8 mm	
Weight	606 g	
Mounting	DIN rail	
<b>ENVIRONMENTAL</b>		
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 60068-2-32	
Vibration	IEC 60068-2-6	

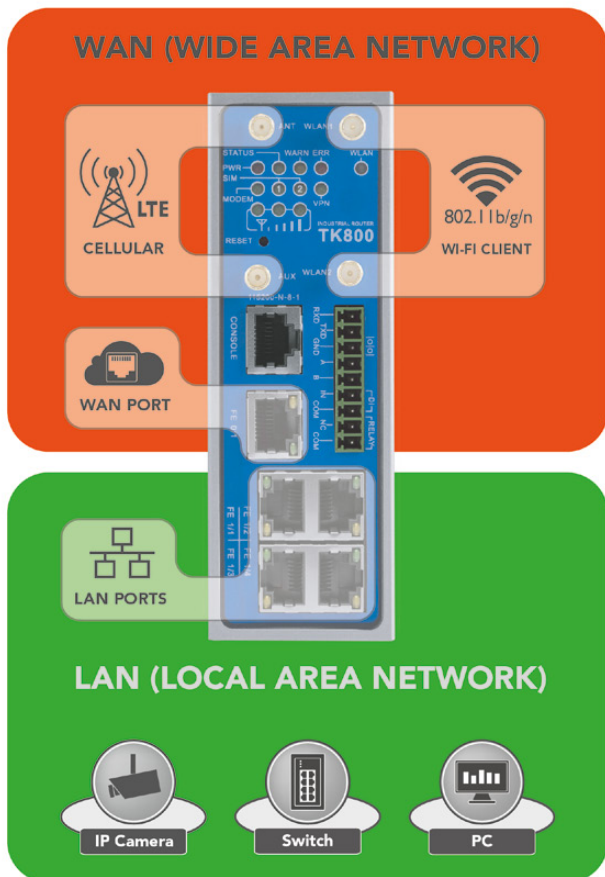
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Technical Details

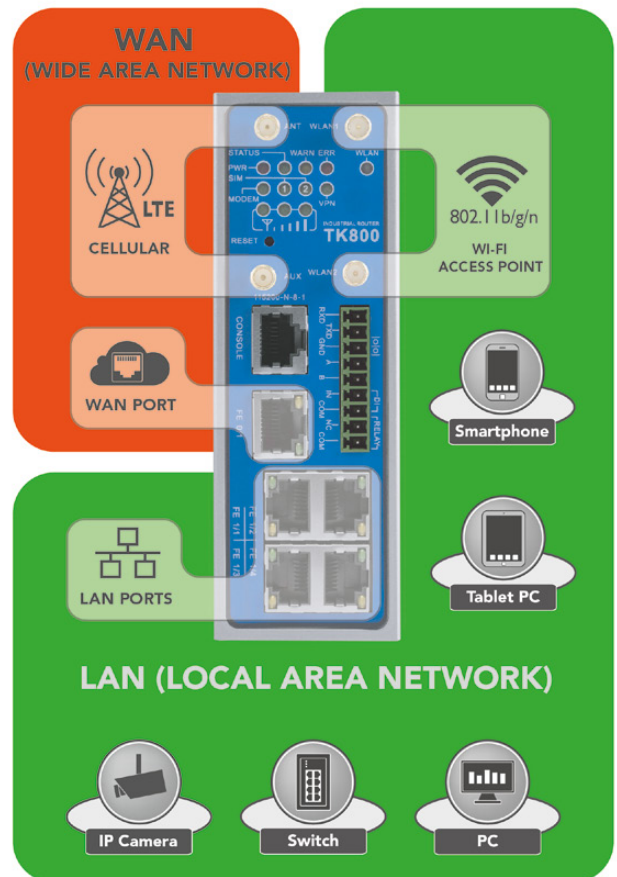
	TK805L-EXW	TK815L-EXW
<b>EMC CHARACTERISTICS</b>		
EDS		EN 61000-4-2, Level 4
Surge protection		EN 61000-4-5, Level 3
EFT		EN 61000-4-4, Level 4
RF		EN 61000-4-3, Level 4
RC		EN 61000-4-6, Level 3
Oscillatory wave immunity		EN 61000-4-11, Level 3
Variation magnetic field immunity		EN 61000-4-8, Level 5

Wi-Fi capability

The LTE Wi-Fi-Router TK815L-EXW supports the Wi-Fi standard IEEE 802.11b/g/n with WPA2 encryption and can be used as Wi-Fi Client or Wi-Fi Access Point. This makes its use so flexible:



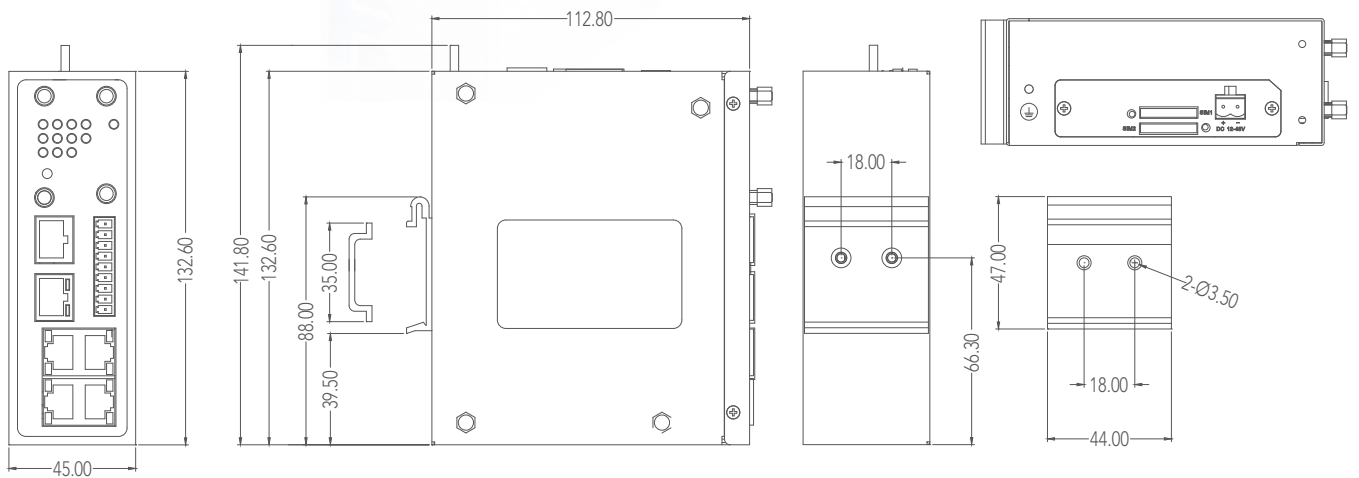
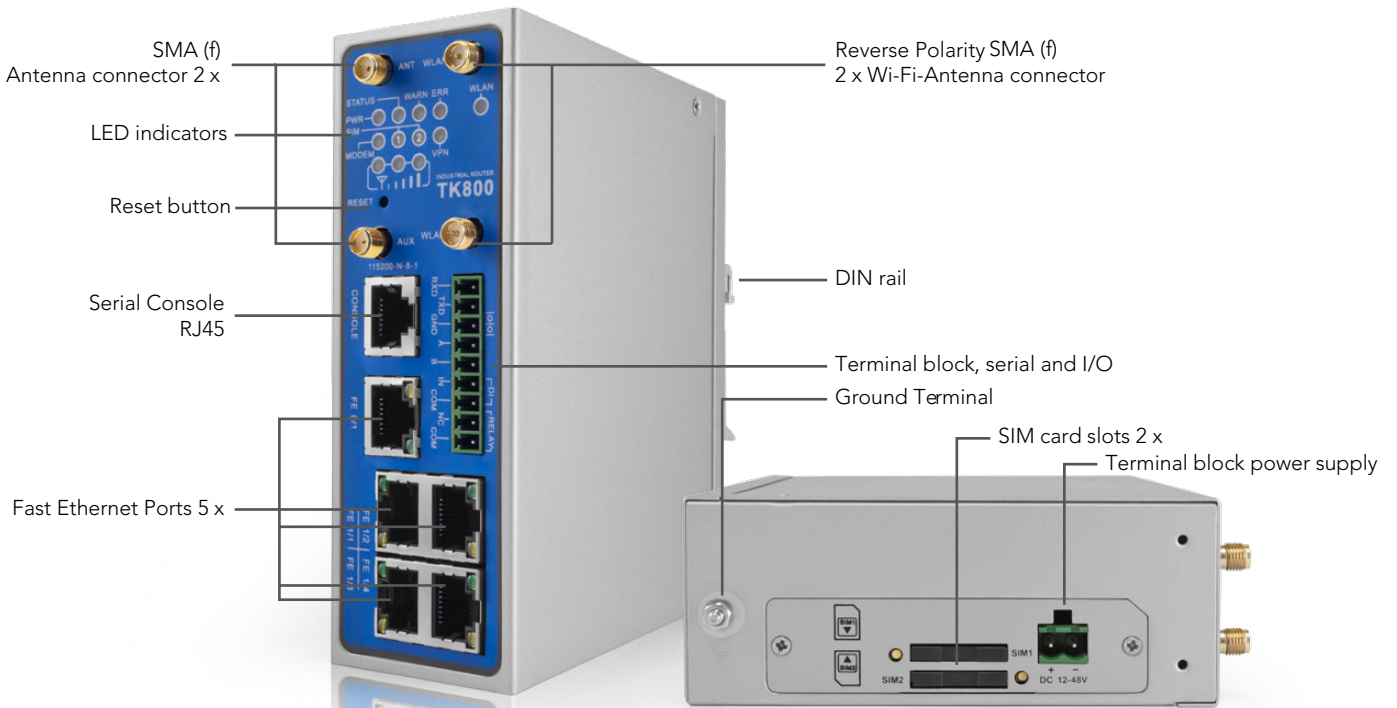
In client mode, the router can connect to the Internet through a Wi-Fi access point, the LTE mobile connection is available as a backup link in this case.



Used as Wi-Fi access point, the router can connect to the wired WAN. Devices such as smartphones and tablet PCs can communicate with the router via Wi-Fi.

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Dimensions TK815L-EXW



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