

**INDUSRTIAL COMMUNICATION / ROUTER**
**TK500 - Industrial Router**
*Basic Line*


TK500 Basic-Line industrial Router with 5 Ethernet Ports in a compact metal housing. Featuring LTE, UMTS, WiFi and serial RS-232 and RS-485 interfaces. Advanced security through VPN (IPsec and OpenVPN) and integrated Firewall.

	<b>TK525L-W</b>	<b>TK525L</b>	<b>TK525U</b>	<b>TK525W</b>
<b>GENERAL DATA</b>				
Type	LTE-WLAN-Router	LTE-Router	UMTS-Router	LAN-Router
Series	TK500			
<b>CELLULAR FEATURES</b>				
Chipset	Cinterion PLS8-E	Huawei ME909s-120	Cinterion PH8	-
2G standard	GSM, GPRS	GSM, GPRS, EDGE	GSM, GPRS	-
3G standard	UMTS, HSDPA, HSUPA, HSPA+	UMTS, HSPA, HSPA+, DC-HSPA+	UMTS, HSDPA, HSUPA, HSPA	-
4G standard	LTE	LTE	-	-
Frequency GSM/GPRS	900/1800 MHz	850/900/1800/1900 MHz	850/900/1800/1900 MHz	-
Frequency UMTS	900/1800/2100 MHz	850/900/1900/2100 MHz	850/900/1800/1900/2100 MHz	-
Frequency LTE	800/900/1800/2100/2600 MHz	800/850/900/1700/1800/1900/2100/2600 MHz	-	-
Download (max)	100 Mbps	150 Mbps	14.4 Mbps	-
Upload (max)	50 Mbps	50 Mbps	5.76 Mbps	-
Authentication	CHAP/PAP/MS-CHAP/MS-CHAP2			-
Cellular antenna connector	1x 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			-

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<b>WI-FI CHARACTERISTICS</b>				
IEEE 802.11b	11 Mbps		-	
IEEE 802.11g	54 Mbps		-	
IEEE 802.11n	300 Mbps		-	
IEEE 802.11i	WPA / TKIP / AES		-	
WEP	64-bit / 128-bit encryption		-	
Access point mode	Yes		-	
Client mode	Yes		-	
Wi-Fi antenna connector	2x Reverse Polarity SMA (f)		-	
<b>ETHERNET INTERFACE</b>				
Connector TX	RJ45			
10/100BaseTX	5 Ports (1 of them WAN)			
IEEE 8023	10BaseT / CSMA/CD (Ethernet)			
IEEE 8023a	10Base2			
IEEE 8023i	10BaseT			
IEEE 8023u	100BaseT(X) / Fast Ethernet			
<b>SERIAL INTERFACES</b>				
Amount	1			
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>				
SIM card slot	1			-
WAN-Port	ADSL Dialup (PPPoE)/Static IP/DHCP (requires 1 Ethernet port)			
<b>SOFTWARE CHARACTERISTICS</b>				
Configuration	Webbrowser (http/https)			
Updates	Firmware update locally or via GPRS/UMTS			
<b>ADVANCED FUNCTIONS</b>				
LED	LED indicators for the signal strength, 5 status LEDs: POWER, STATUS, WARN, ERROR, WIFI	LED indicators for the signal strength, 4 status LEDs: POWER, STATUS, WARN, ERROR		

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<b>NETWORK CHARACTERISTICS</b>				
Routing	Static routes			
Network protocols	ICMP, TCP, IP, UDP, DHCP, NTP, DNS, HTTP, HTTPS, Telnet, ARP, VRRP, PPP			
Connection inspection	PPP LCP echo and ICMP keep alive 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	Supports IPsec IKEv1			
OpenVPN	Client and Server			
GRE	Preshared key, digital certificates			
VPN authentication	Stateful Packet Inspection (SPI), multicast filtering, filter PING packets, preventing DoS attacks, different firewall strategies			
Firewall	Prevents illegal host access			
Port mapping	Extranet users can access specific intranet access ports			
Access control	Flexible access control of TCP, UDP and ICMP packets			
Realtime clock	Provides the system with the current time (NTP)			
<b>POWER SUPPLY</b>				
Power supply V DC	12 - 24 V DC			
Connector	Terminal blocks 7-pin (m)			
Power consumption	2.4 W (standby) / 3.84 W (active)			
<b>PHYSICAL CHARACTERISTICS</b>				
Housing material	Metal			
Ingress protection	IP30			
Dimensions (W x H x D)	35 x 127 x 108.2 mm			
Weight	450 g			
Mounting	DIN rail			
<b>ENVIRONMENTAL</b>				
Operating temperature range	-15 - +70 °C			
Humidity	5 - 95 %, non condensing			

