

# Industrial Router - TK500 Series

TK500 RELEASE MAY 2021



## Industrial Router TK500 Series

- Five Ethernet Ports
- Depending on version with WiFi, RS-232, RS-485, 4G LTE, LTE Cat. 1
- DIN-Rail mounting and 12 to 24 V DC power supply
- Integrated Firewall, OpenVPN and IPsec
- Very compact and rugged housing
- Fully integrated with Welotec Smart EMS and Remote Access Portal

MODEL OVERVIEW - INDUSTRIAL ROUTER TK500 SERIES	
TK525L-W	LTE-WiFi-Router
TK525L	LTE-Router
TK535L1	LTE Cat. 1 Router
TK525W	LAN-Router

# Industrial Router - TK500 Series

## TECHNICAL DETAILS

	TK525L-W	TK525L	TK535L1	TK525W
<b>GENERAL DATA</b>				
Type	LTE-WiFi-Router	LTE-Router	LTE Cat. 1 Router	LAN-Router
Series	TK500 Release May 2021			
<b>CELLULAR FEATURES</b>				
Chipset	Quectel EC25	Quectel EC25	Quectel EC21	-
4G Standard	LTE Cat. 4	LTE Cat. 4	LTE Cat. 1	-
GSM Band	B3/B8	B3/B8	B3/B8	-
UMTS Band	B1/B8	B1/B8	B1/B8	-
LTE Band	B1/B3/B7/B8/B20/ B28A/B38/B40/B41	B1/B3/B7/B8/B20/ B28A/B38/B40/B41	B1/B3/B7/B8/B20/ B28A	-
Download (max)	150 Mbps	150 Mbps	10 Mbps	-
Upload (max)	50 Mbps	50 Mbps	5 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			-
<b>WIFI 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	-		
WiFi antenna connector	2x Reverse Polarity SMA (f)	-		

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	TK525L-W	TK525L	TK535L1	TK525W
<b>ETHERNET INTERFACE</b>				
Connector TX	RJ45			
10/100BaseTX	5 Ports (1 of them WAN)			
IEEE 802.3	10BaseT / CSMA/CD (Ethernet)			
IEEE 802.3a	10Base2			
IEEE 802.3i	10BaseT			
IEEE 802.3u	100BaseT(X) / Fast Ethernet			
WAN-Port	ADSL Dialup (PPPoE)/Static IP/DHCP (uses 1 Ethernet Port)			
<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	2			-
<b>SOFTWARE CHARACTERISTICS</b>				
Configuration	Webbrowser (http/https)			
Updates	Firmware update locally or via GPRS/UMTS/LTE			
<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	4 status LEDs: POWER, STATUS, WARN, ERROR	

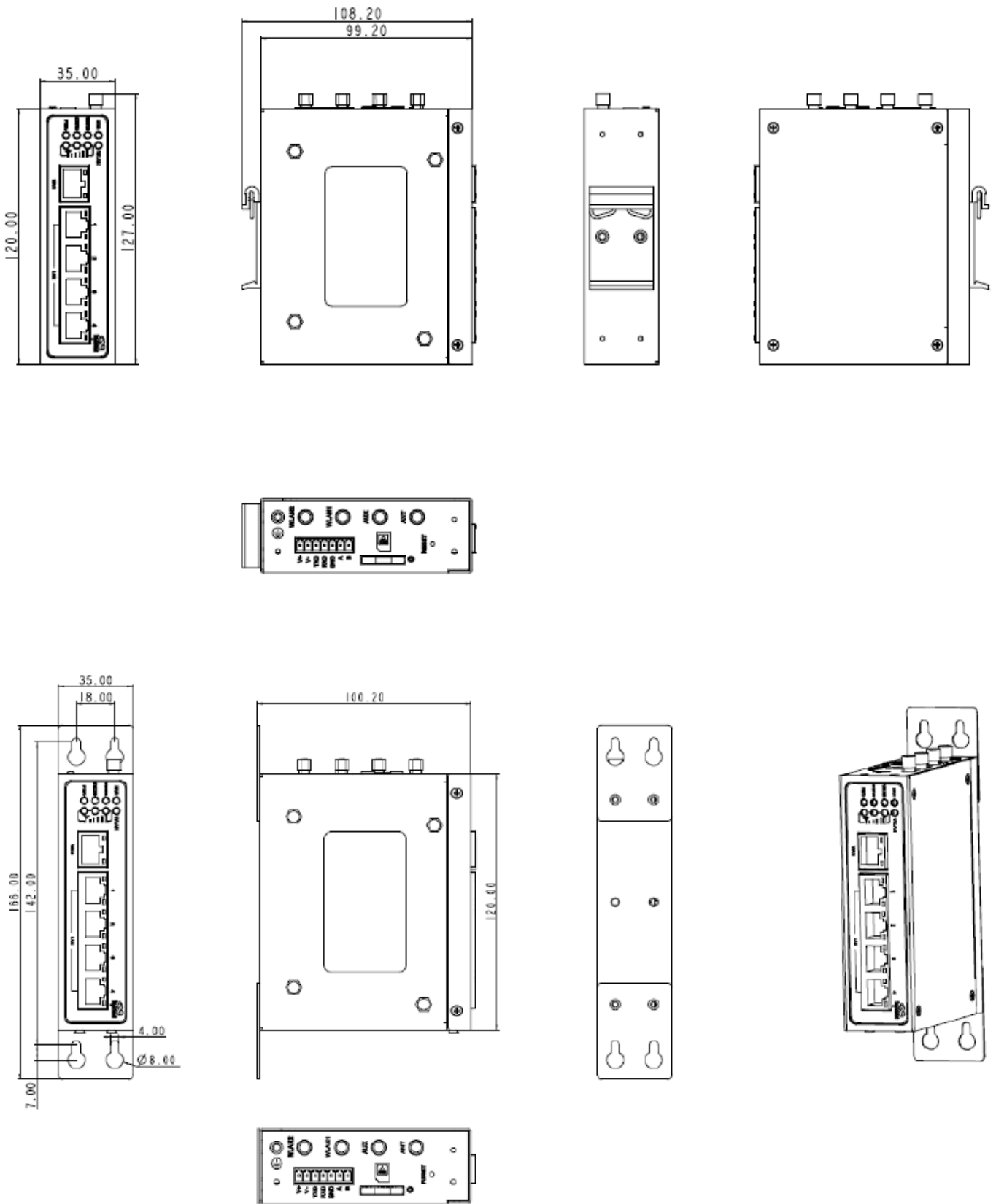
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## TECHNICAL DETAILS

	TK525L-W	TK525L	TK535L1	TK525W
<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			
VPN authentication	Preshared key, digital certificates			
Firewall	Stateful Packet Inspection (SPI), multicast filtering, filter PING packets, preventing DoS attacks, different firewall strategies			
MAC address assignment	Prevents illegal host access			
Port forwarding	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	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 (WxHxD)	35 x 127 x 108.2 mm			
Weight	450 g			
Mounting	DIN rail			
<b>ENVIRONMENTAL</b>				
Operating temperature range	-20 - +70 °C			
Humidity	5 - 95 %, non condensing			

# Industrial Router - TK500 Series

DIMENSIONS (MM)



# Industrial Router - TK500 Series

MODEL VIEWS



TK525L-W



TK525L/TK535L1



TK525W



TK525L-W -  
VIEW FROM ABOVE INCL. DIN RAIL BRACKET