

RK2X SERIES

Industrial routers for complete and secure remote assistance in any industrial scenario



HIGHLIGHTS

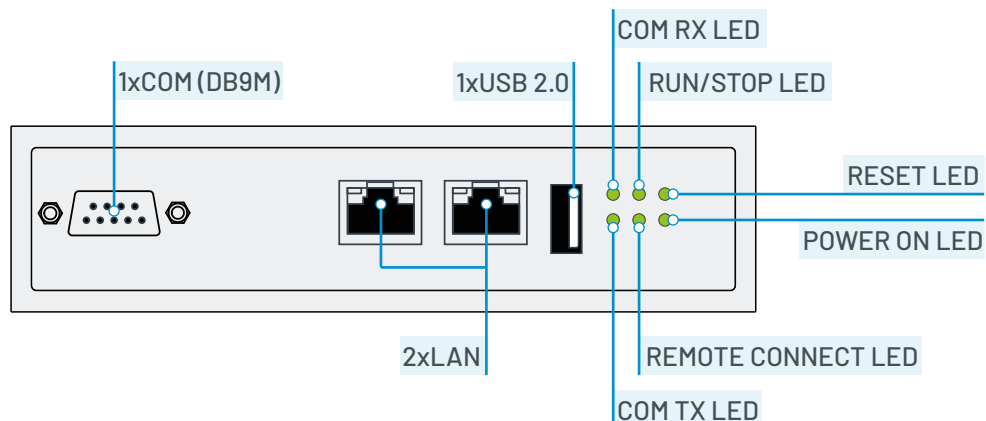
- Integrated UBIQUITY software for IEC 62443-certified remote assistance
- Access to automation devices connected to the router via Ethernet, serial and USB ports through a VPN optimized for industrial communications
- Provides remote assistance and remote access on any automation device where the software application (UBIQUITY runtime) cannot be installed or in machinery and plants without an Internet connection.
- Reliability, speed and low latency guaranteed by end-to-end connection
- The systems are based on ARM processors and feature two Gigabit Ethernet ports (one LAN and one WAN), a USB 2.0 interface, and a serial multi-standard connection
- RK21 and RK22 systems available with Wi-Fi module and 4G LTE modem for maximum wireless connectivity
- RK22 available with an integrated four-port Gigabit Ethernet switch
- Available with two 24VDC digital inputs for enabling remote access and device reset and two low-voltage relay outputs for useful operational signaling
- Rugged and elegant chassis for book or DIN-rail mounting
- Available with extended operating temperature range for installations in harsh environments



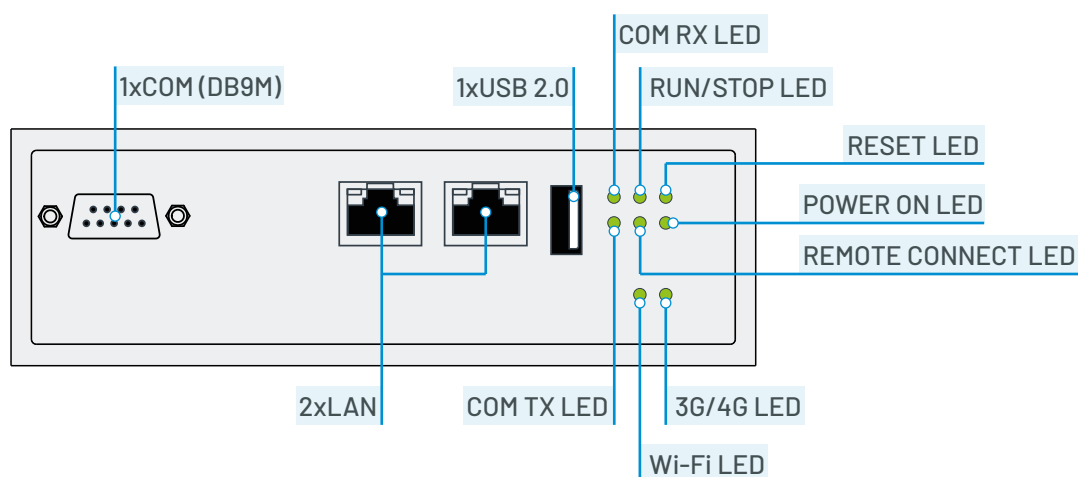
SERIE RK2X

I/O SHIELD

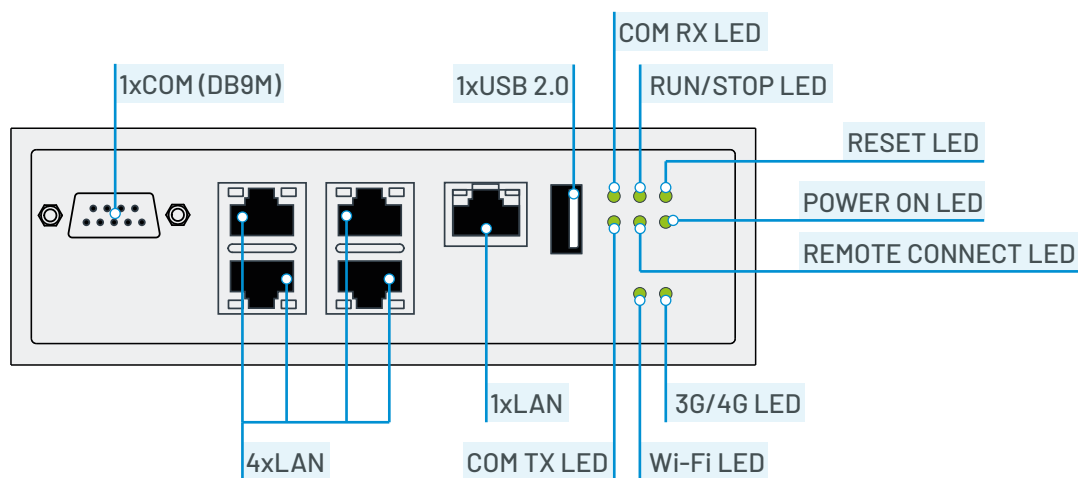
RK20 (frontal access)



RK21 (frontal access)

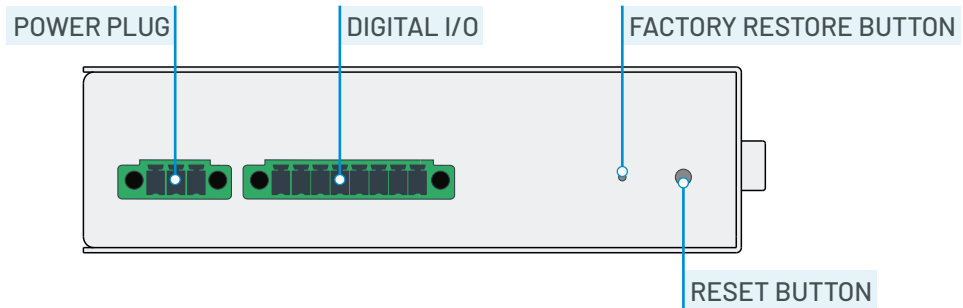


RK22 (frontal access)

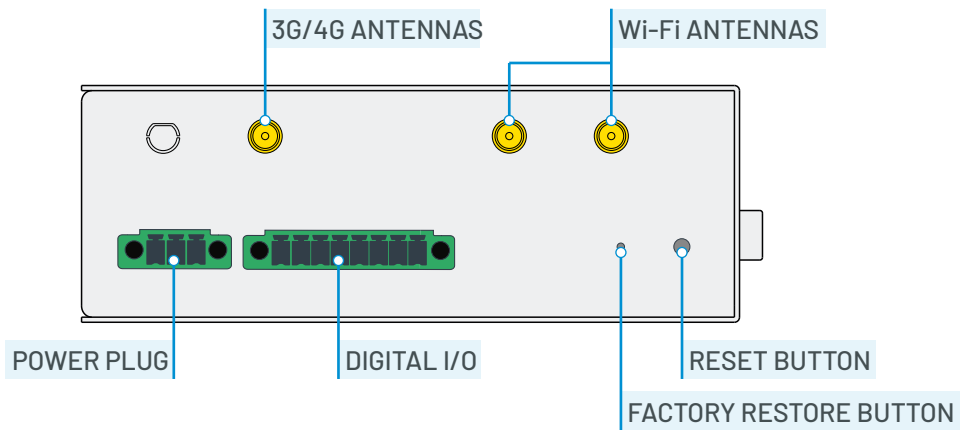


I/O SHIELD

RK20 (upper access)



RK21-22 (upper access)

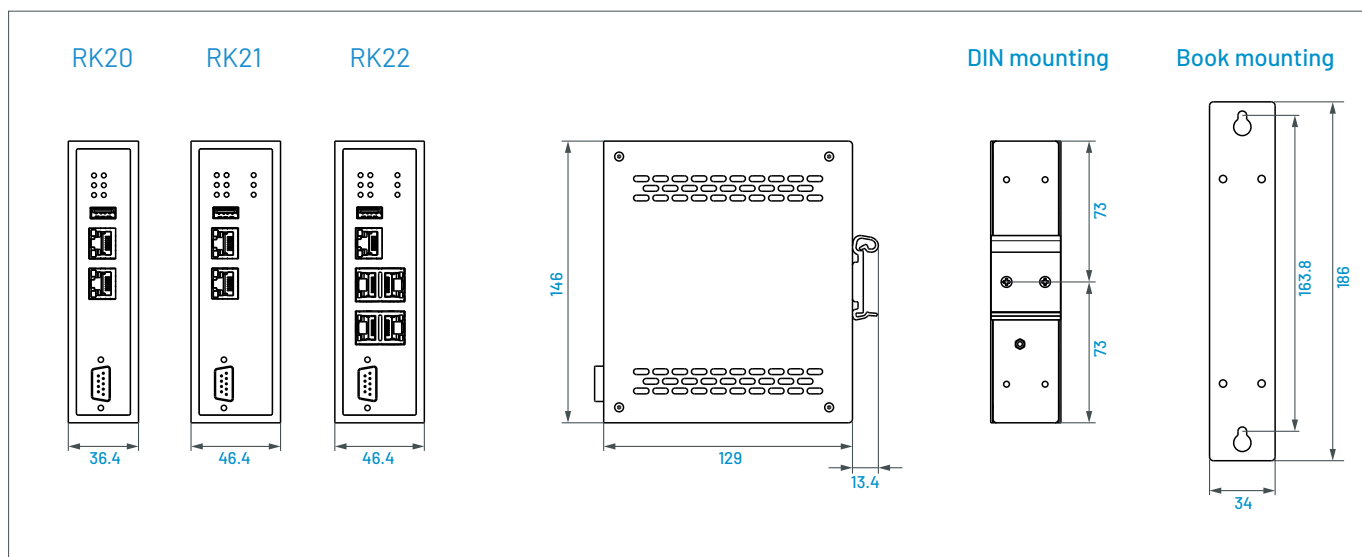


DIMENSIONS

FRONT VIEW

SIDE VIEW

REAR VIEW



COMPARISON TABLE

ROUTER	RK20	RK21	RK22
WAN	1x Gigabit Ethernet	1x Gigabit Ethernet	1x Gigabit Ethernet
LAN	1x Gigabit Ethernet	1x Gigabit Ethernet	1x Switch Ethernet (4x Gigabit Ethernet)
USB	1x USB 2.0	1x USB 2.0	1x USB 2.0
SERIAL	1xDB9M	1xDB9M	1xDB9M
CONNECTIVITY	Cellular	X	✓ (not available for RK21 - WiFi version)
	Wi-Fi	X	✓
DIGITAL INPUT/ OUTPUT	✓	✓	✓
VPN	✓	✓	✓
NAT/ROUTING	✓	✓	✓
INTERNET SHARING	✓	✓	✓
INTEGRATED FIREWALL	✓	✓	✓
OPERATING TEMPERATURE	-20°C + 60°C with radio module -20C + 65°C without radio module		

SERIE RK2X

TECHNICAL DATA

		RK						
		20	21(Wi-Fi version)	21(Wi-Fi + 4G version)	21(4G version)	22(Wi-Fi version)	22(Wi-Fi + 4G version)	22(4G version)
REMOTE ASSISTANCE SW	Only RK/RM	UBIQUITY Router Runtime						
O.S. INSTALLED		Linux Yocto						
	Utility	Asem System Manager						
PROTECTION GRADE IP	IP rating	IP20						
	NEMA rating	UL type 1(indoor only)						
CASE	Installation	DIN mounting/ Book mounting						
	Material	Aluminum						
PROCESSOR (soldered on-board)		NXP® i.MX7 DualLite ARM Cortex A7/M4 1GHz • integrated GPU						
SYSTEM MEMORY RAM		1GB (DDR3L module)						
MASS STORAGE		8GB eMMC MLC						
INTERFACES	LAN	1x Gigabit Ethernet (RJ45)			1x Switch Ethernet (4x Gigabit Ethernet)			
	WAN	1x Gigabit Ethernet (RJ45)						
	USB	1x USB 2.0 (Type-A)						
	SERIAL	1x RS232/422/485 isolated (DB9M)						
WI-FI	Model	-	Intel AC9260 (M.2 interface)		-	Intel AC9260 (M.2 interface)		-
	Standard	-	IEEE 802.11a/b/g/n/ac, 2.4GHz/5GHz • Bluetooth 5.1 • Data rate up to 1.73Gbps		-	IEEE 802.11a/b/g/n/ac, 2.4GHz/5GHz • Bluetooth 5.1 • Data rate up to 1.73Gbps		-
	Security	-	WEP 64/128bit, WPA, WPA2, WPS, 802,1x		-	WEP 64/128bit, WPA, WPA2, WPS, 802,1x		-
	Antenna	-	2x RP-SMA Female connector		-	2x RP-SMA Female connector		-
CELLULAR NETWORK	Standard	-	2G/3G/4G LTE CAT 4 Multi-Band All regions • Data rate up to 50Mbps upload / 150Mbps download		-	2G/3G/4G LTE CAT 4 Multi-Band All regions • Data rate up to 50Mbps upload / 150Mbps download		-
	Antenna	-	1x SMA Female connector		-	1x SMA-F connector		-
	SIM	-	1x SIM card socket push-push type		-	1x SIM card socket push-push type		-
DIGITAL INPUT	IN0	Security key for WAN connection activation. Function managed by UBIQUITY (RK/RM) Freely configurable using UNI00 (DM)						
	IN1	UBIQUITY Router software reset (RK/RM) Freely configurable using UNI00 (DM)						
	Type	0÷24V isolation 500V						
DIGITAL OUTPUT	OUT0	UBIQUITY Router WAN enabled connection signal (RK/RM) Freely configurable using UNI00 (DM)						
	OUT1	UBIQUITY remote assistance service running signal (RK/RM) Freely configurable using UNI00 (DM)						
	Type	Output with relay (max 200mA - 24VDC - N.O.)						
POWER SUPPLY INPUT		12/24VDC (9 ÷ 34VDC) isolated						
OPERATING TEMPERATURE		-20°C ÷ 60°C w/ radio module -20°C ÷ 65°C w/o radio module						
STORAGE TEMPERATURE		-20° ÷ 60°C						
OPERATING/STORAGE RELATIVE HUMIDITY		20% ÷ 90% RH (non-condensing)						
APPROVALS		CE RoHS UKCA cULus Listed						

VERSIONS



RK20



RK21



RK22