


Industrial Automation - Products & Configurations

RK21-ET 4G-GLOBAL > note 1		POWER [W]
Basic configuration	ARM i.MX 7Dual, Cortex A7 1 GHz dual core • 1 GB RAM • 8GB eMMC • 3G/4G global modem • without antenna • ASEM UBIQUITY ROUTER runtime • Extended temperature range -20° ÷ +65°C • DIN-RAIL BOOK mounting o WALL BOOK mounting • 12 months warranty	10

RK21-ET WiFi > note 1		POWER [W]
Basic configuration	ARM i.MX 7Dual, Cortex A7 1 GHz dual core • 1 GB RAM • 8GB eMMC • WiFi module • without antenna • ASEM UBIQUITY ROUTER runtime • Extended temperature range 0° ÷ +60°C • DIN-RAIL BOOK mounting o WALL BOOK mounting • 12 months warranty	7

RK21-ET 4G-GLOBAL WiFi > note 1		POWER [W]
Basic configuration	ARM i.MX 7Dual, Cortex A7 1 GHz dual core • 1 GB RAM • 8GB eMMC • 3G/4G global modem • WiFi module • without antenna • ASEM UBIQUITY ROUTER runtime • Extended temperature range 0° ÷ +60°C • DIN-RAIL BOOK mounting o WALL BOOK mounting • 12 months warranty	11

REMOTE ASSISTANCE	ASEM UBIQUITY ROUTER runtime	
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OPTIONS		POWER [W]
3G / 4G ANTENNAS	2G/3G/4G stilo steerable antenna • RK21 direct mount or panel mount using extension cable • 10W, 50 Ohm , 1 dBi • 72mm • SMA-M	-
	2G/3G/4G wall-mount antenna with 3m cable • wall mount with 90° bracket • IP67 • 2W, 50 Ohm, 2 dBi • 250mm • SMA-M	-
	2G/3G/4G outdoor antenna with 1m cable • outdoor panel mount • IP67 • 5W, 50 Ohm, 3 dBi • h48mm x Ø50mm • SMA-M	-
	2G/3G/4G antenna with magnetic base with 3m cable • panel mount • 50 Ohm • 247mm • SMA-M	-
CABLES > note 2	3m extension cable for antennas • RG58/U low loss cable • IP20 • SMA-M/F	-
	5m extension cable for antennas • RG58/U low loss cable • IP20 • SMA-M/F	-
	10m extension cable for antennas • RG58/U low loss cable • IP20 • SMA-M/F	-
WiFi ANTENNAS	Kit for two WiFi BLADE dual band steerable antennas • RK21 direct mount or panel mount using extension cable • 3W, 50 Ohm • 157mm • RP-SMA-M	-
	Kit for two WiFi STILO dual band steerable antennas • RK21 direct mount or panel mount using extension cable • 2W, 50 Ohm • 194mm • RP-SMA-M	-
WiFi CABLES > note 2	Kit for two 3m extension cables for WiFi antenna • LMR-200 low loss cable • IP20 • RP-SMA-M/F	-
	Kit for two 5m extension cables for WiFi antenna • LMR-200 low loss cable • IP20 • RP-SMA-M/F	-
	Kit for two 10m extension cables for WiFi antenna • LMR-200 low loss cable • IP20 • RP-SMA-M/F	-
WARRANTY EXTENSION	Warranty extension to 18 month	-
	Warranty extension to 24 months	-
	Warranty extension to 36 months	-

NOTES	
The power consumption of the configuration takes into consideration the maximum absorbed power of every component and does not include the consumption of the devices connected to the USB ports.	
1: Price does not include ASEM UBIQUITY DOMAIN that must be purchased one-off at the first order of a license or system that includes the UBIQUITY runtime. See pg.402	
2: The efficiency of the antennas and the extension cables is dependent on the quality of the radio frequency signal present at the installation site therefore we suggest not to use more than one extension cable between the antenna and the router.	

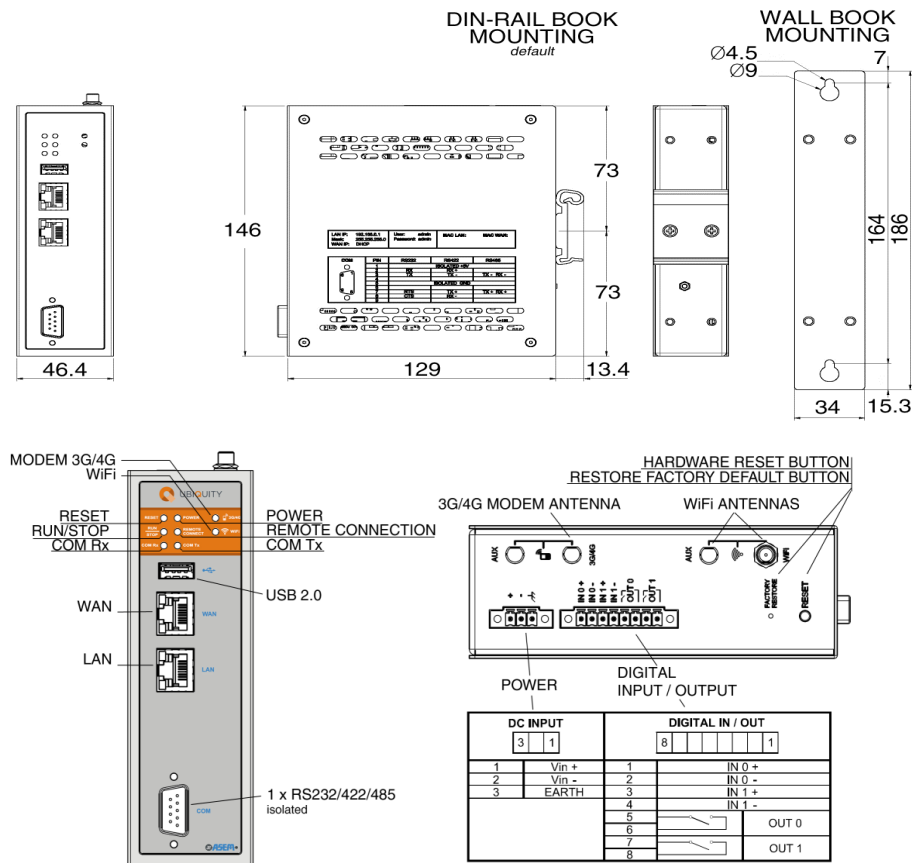


TECHNICAL SPECIFICATIONS		
Case	Aluminium, DIN-RAIL BOOK MOUNTING, WALL BOOK mounting kit included	
Overall dimensions & weight	See details on the related section	
Software	Remote assistance	ASEM UBIQUITY ROUTER runtime
Features	VPN with access to the Ethernet (LAN) subnetwork of the UBIQUITY ROUTER	
	Serial port virtualization; MPI protocol not supported	
	Multiple connection from different Control Center with different VPN for each client	
VPN	Technology	Proprietary VPN technology optimized for industrial communication protocols with complete access to the Ethernet remote sub-network. Support for UDP broadcast. No need to reconfigure remote network devices. The service computer uses real IP in the IP address space of the remote network.
	Security	Secure and protected communication by TLS encrypted connections
Power supply	Input voltage 9÷34V DC • Power supply section integrated on board	
Motherboard	ASEM R371	
Processor	ARM i.MX 7Dual multicore Heterogeneous • Cortex A7 1 GHz dual core, 533 MHz system memory bus	
System memory	1GB DDR3L soldered on board	
Storage memory	eMMC MLC 8GB (Solid State Drive), 8bit file system organization	
Frontal access interfaces	1 x Ethernet 10/100/1000 Mbps (RJ45) for LAN connection	
	1 x Ethernet 10/100/1000 Mbps (RJ45) for WAN connection	
	1 x USB 2.0 (Type-A / host)	
	1 x RS-232/422/485 (DB9M) multiprotocol, isolated	
Digital Input	INO	Security key input for WAN connection activation. Function managed by Control Center. Disabled by default.
	INI	UBIQUITY ROUTER software reset input
	Type	0÷24V DC, 500V isolation
Digital Output	OUT0	UBIQUITY ROUTER authenticated on Domain and WAN remote connection enabled signalling
	OUT1	Remote assistance service running
	Type	Output with relay 200mA@24V DC max for contact (N.O. - normally open)
Buttons	UBIQUITY ROUTER hardware reset UBIQUITY ROUTER factory default restore	
Approvals	CE (EN 61326-1, EN 62311, IEC 61010-1, IEC 61010-2-201) • cULus LISTED (UL 61010)	
Protection grade	IP20	
Environmental specifications	Operating temperature: -20° ÷ +65°C • 0° ÷ +60°C with WiFi	
	Storage temperature: -40° ÷ +85°C • humidity: 80% (non-condensing)	
Standard warranty	12 months • Warranty management by ASEM headquarters	
RK21 WIFI		
Module WiFi	Type	Half Mini PCIe module
	Standard	IEEE 802.11a/b/g/n • 2.400÷2.4835GHz / 5.15÷5.85GHz • Data rate 802.11b: 11Mbps / 802.11a/g: 54Mbps / 802.11n: 300Mbps
	Features	client / access point
	Security	WPA2
	Rx Sensitivity	802.11a: -73dBm / 802.11g: -74dBm / 802.11n(2,4GHz): -72dBm@HT20, -69dBm@HT40 / 802.11n(5GHz): -69dBm@HT20, -68dBm@HT40
	Antenna	1 x RP-SMA-F connector • no antenna included
RK21 4G - GLOBAL		
Modem 4G	Type	modem 2G/3G/4G LTE CAT 4 Multi-Band up tp 50Mbps upload / 150Mbps download
	Standard	FDD-LTE: B1/B2/B3/B4/B5/B7/B8/B12/B13/B18/B19/B20/B25/B26/B28/B66 • TDD-LTE: B34/B38/B39/B40/B41 • UMTS/HSDPA/HSPA+: B1/B2/B4/B5/B6/B8/B19 • GSM/GPRS/EDGE: 850/900/1800/1900 MHz
	Approvals	CE
	Antenna	1 x SMA-F connector • no antenna included

MODEM AND NETWORK COVERAGE			
Note: please consider that the following information are given for guidance only. Mobile networks coverage and supported frequencies have to be verified with local providers in the installation area.			
	3G	Europe	✓
		North/Latin America	✓
		Asia	✓
		Africa&Oceania	✓
	4G/LTE	Europe	✓
		North America	✓
		Latin America	✓
		Asia	✓
		Africa&Oceania	✓



DIMENSIONS (mm)



4G MODEM and WiFi ANTENNAS INSTALLATION

