


**Industrial Automation - Products & Configurations**

RK22-ET > note 1		POWER [W]
Basic configuration	ARM i.MX 7Dual, Cortex A7 1 GHz dual core • 1 GB RAM • 8GB eMMC • 4 ports unmanaged Ethernet switch • ASEM UBIQUITY ROUTER runtime • Extended temperature range -20° ÷ +65°C • DIN-RAIL BOOK mounting o WALL BOOK mounting • 12 months warranty	8

RK22-ET 4G-GLOBAL > note 1		POWER [W]
Basic configuration	ARM i.MX 7Dual, Cortex A7 1 GHz dual core • 1 GB RAM • 8GB eMMC • 4 ports unmanaged Ethernet switch • <b>3G/4G global modem</b> • without antenna • ASEM UBIQUITY ROUTER runtime • Extended temperature range -20° ÷ +65°C • DIN-RAIL BOOK mounting o WALL BOOK mounting • 12 months warranty	12

RK22-ET WiFi > note 1		POWER [W]
Basic configuration	ARM i.MX 7Dual, Cortex A7 1 GHz dual core • 1 GB RAM • 8GB eMMC • 4 ports unmanaged Ethernet switch • <b>WiFi module</b> • without antenna • ASEM UBIQUITY ROUTER runtime • Extended temperature range 0° ÷ +60°C • DIN-RAIL BOOK mounting o WALL BOOK mounting • 12 months warranty	10

RK22-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 • 4 ports unmanaged Ethernet switch • <b>3G/4G global modem • WiFi module</b> • without antenna • ASEM UBIQUITY ROUTER runtime • Extended temperature range 0° ÷ +60°C • DIN-RAIL BOOK mounting o WALL BOOK mounting • 12 months warranty	14

<b>REMOTE ASSISTANCE</b>	ASEM UBIQUITY ROUTER runtime	↓	
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OPTIONS		POWER [W]
<b>3G / 4G ANTENNAS</b>	2G/3G/4G stilo steerable antenna • RK22 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	-
<b>CABLES &gt; note 2</b>	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	-
<b>WiFi ANTENNAS</b>	Kit for two WiFi BLADE dual band steerable antennas • RK22 direct mount or panel mount using extension cable • 3W, 50 Ohm • 157mm • RP-SMA-M	-
	Kit for two WiFi STILO dual band steerable antennas • RK22 direct mount or panel mount using extension cable • 2W, 50 Ohm • 194mm • RP-SMA-M	-
<b>WiFi CABLES &gt;note 2</b>	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	-
<b>WARRANTY EXTENSION</b>	Warranty extension to 18 month	-
	Warranty extension to 24 months	-
	Warranty extension to 36 months	-

NOTES	
1	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 R372
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	4 x Unmanaged Ethernet switch 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	IN0 Security key input for WAN connection activation. Function managed by Control Center. Disabled by default. IN1 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) pending
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
RK22 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
RK22 4G - GLOBAL	
Modem 4G/LTE	Type 2G/3G/4G LTE CAT 4 Multi-band modem up to 50Mbps upload / 150Mbps download Bands 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 • UMS/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		
<b>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.</b>		
		<b>RK22 4G GLOBAL</b>
<b>3G</b>	Europe	✓
	North/Latin America	✓
	Asia	✓
	Africa&Oceania	✓
<b>4G /LTE</b>	Europe	✓
	North America	✓
	Latin America	✓
	Asia	✓
	Africa&Oceania	✓

