Industrial Automation - Products & Configurations

RK10 BASIC SYSTEM > note 1		POWER [W]
Basic configuration	ARM Cortex A8, 1 GHz ▪ 512 MB RAM ▪ 256 MB NAND-Flash ▪ 4GB eMMC ▪ Windows Embedded Compact 7 Pro ▪ ASEM UBIQUITY ROUTER runtime ▪ ASEM System Manager ▪ DIN-RAIL BOOK or WALL BOOK mounting ▪ 12 months warranty	6

RK11 BASIC SYSTEM > note 1		POWER [W]
Basic configuration	ARM Cortex A8, 1 GHz ▪ 512 MB RAM ▪ 256 MB NAND-Flash ▪ 4GB eMMC ▪ 2G/3G/3G+ modem ▪ without antenna ▪ Windows Embedded Compact 7 Pro ▪ ASEM UBIQUITY ROUTER runtime ▪ ASEM System Manager ▪ DIN-RAIL BOOK or WALL BOOK mounting ▪ 12 months warranty	10

PROCESSOR	ARM Cortex A8 processor ▪ Freescale i.MX535 ▪ 1 GHz ▪ 400Mhz memory bus ▪ Soldered on board		

RK10-ET BASIC SYSTEM > note 1		POWER [W]
Basic configuration	ARM Cortex A8, 800 MHz ▪ 512 MB RAM ▪ 256 MB NAND-Flash ▪ 2GB eMMC ▪ Extended Temperature range ▪ Windows Embedded Compact 7 Pro ▪ ASEM UBIQUITY ROUTER runtime ▪ ASEM System Manager ▪ DIN-RAIL BOOK or WALL BOOK mounting ▪ 12 months warranty	6

RK11-ET BASIC SYSTEM > note 1		POWER [W]
Basic configuration	ARM Cortex A8, 800 MHz ▪ 512 MB RAM ▪ 256 MB NAND-Flash ▪ 4GB eMMC ▪ 2G/3G/3G+ modem ▪ without antenna ▪ Extended Temperature range ▪ Windows Embedded Compact 7 Pro ▪ ASEM UBIQUITY ROUTER runtime ▪ ASEM System Manager ▪ DIN-RAIL BOOK or WALL BOOK mounting ▪ 12 months warranty	10

PROCESSOR	ARM Cortex A8 processor ▪ Freescale i.MX537 ▪ 800 MHz ▪ 400Mhz memory bus ▪ Soldered on board		
REMOTE ASSISTANCE	ASEM UBIQUITY Router runtime		-

OPTIONS only for RK11 / RK11-ET			POWER [W]
ANTENNAS	Pentaband stilo antenna ▪ RK11 direct mount or panel mount using extention cable ▪ 20W, 0dBi, 50 Ohms ▪ 48mm ▪ SMA-M		-
	Pentaband wall-mount antenna with **3mt** cable ▪ wall mount with 90° bracket ▪ IP67 ▪ 50W, 2,5dBi, 50 Ohms ▪ 248mm ▪ SMA-M		-
	Pentaband outdoor antenna with **1mt** cable ▪ outdoor panel mount ▪ IP67 ▪ 5W, 3,2dBi, 50 Ohms ▪ 48x50mm ▪ SMA-M		-
CABLES >note 2	**3mt** extension cable for antennas ▪ RG58/U low loss cable ▪ IP20 ▪ SMA-M/F		-
	5mt extension cable for antennas ▪ RG58/U low loss cable ▪ IP20 ▪ SMA-M/F		-
	10mt extension cable for antennas ▪ RG58/U low loss cable ▪ IP20 ▪ SMA-M/F		-

COMMON OPTIONS			POWER [W]
MPI	Adapter cable from DB15F to DB9F (MPI/PPI)		-
WARRANTY EXTENSION	Warranty extension to 18 months on basic system and its variants		
	Warranty extension to 24 months on basic system and its variants		
	Warranty extension to 36 months on basic system and its variants		

NOTES

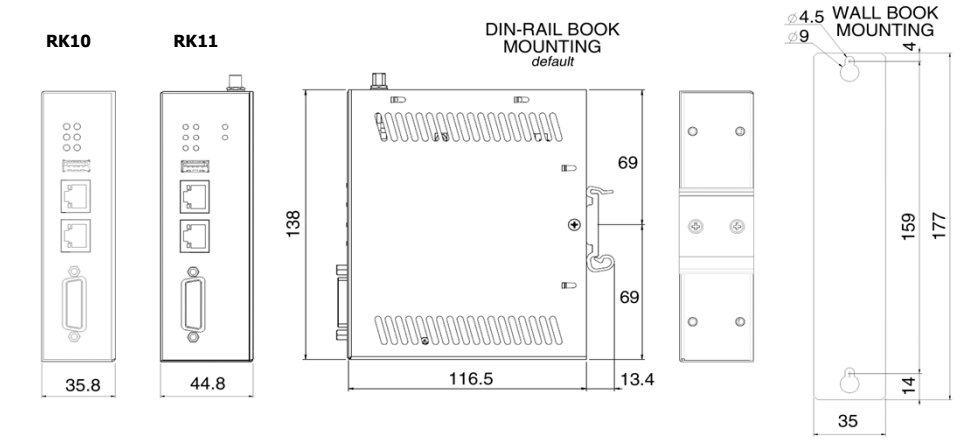
For power consumption calculation we reccomend to read the tips on pg. 4. The power values does not include the absorbed power of USB devices connected to the ports.

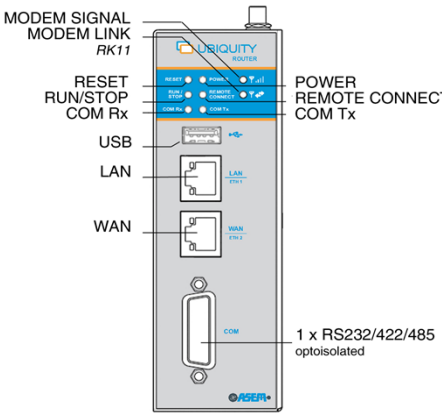
1: Price does not include ASEM UBIQUITY DOMAIN that must be purchased one-off at the first order of a license or system that includes the UBIQUITY runtime. See pg.205

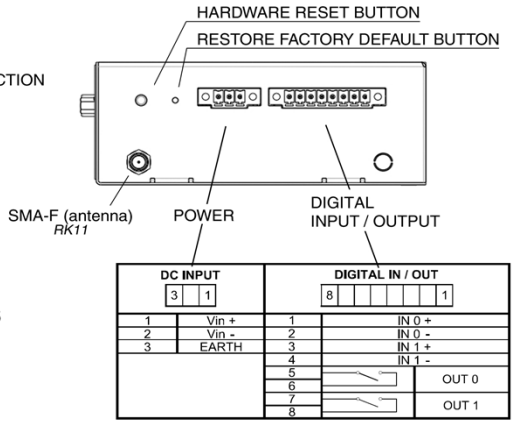
2: The efficiency of the antennas and the extension cables is dependent on the quality of the radio frequency signal present at the installation site therefore we suggest not to use more than one extension cable between the antenna and the router.

TECHNICAL SPECIFICATIONS		
Case		DIN-RAIL BOOK MOUNTING, WALL BOOK mounting kit included
Overall dimensions & weight		See details on the related section
Operating System		Microsoft Windows Embedded Compact 7 Pro license with Microsoft olographic sticker
Software	Remote assistance	ASEM UBIQUITY ROUTER runtime
	Utility	ASEM System Manager ▪ Backup&Restore
Features		VPN with access to the Ethernet (LAN) subnetwork of the Ubiquity Router
		Serial port virtualization and Ethernet-MPI gateway
		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	SSL/TLS tunnel over UDP or TCP to encapsulate the VPN traffic; asymmetric cryptography and X509 certificates for session authentication, symmetric encryption for confidentiality and message authentication codes for message integrity
Power supply		Input voltage 9÷36V DC ▪ Power supply section integrated on board
Motherboard		ASEM R171
Processor	RK	ARM Cortex A8 ▪ Freescale i.MX535 ▪ 1 GHz, 400 MHz system memory bus
	RK-ET	ARM Cortex A8 ▪ Freescale i.MX537 ▪ 800 MHz, 400 MHz system memory bus
System mermory		512MB DDR3-800
Storage memory		NAND-Flash 256MB Read-Only
		eMMC (Solid State Disk) 2/4GB, 8bit, file system organization
Frontal access interfaces		1 x Ethernet 100 Mbps (RJ45) for LAN connection
		1 x Ethernet 10/100 Mbps (RJ45) for WAN connection
		1 x USB 2.0 (Type-A / host)
		1 x RS-232/422/485 (DB15M)optoisolated MPI protocol compatibile up to 187,5Kbit/s
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 optoisolation
Digital Output	OUT0	UBIQUITY Router WAN 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 55022, EN 61000-3-2/3, EN 55024, EN 60950-1)
Protection grade		IP20
Environmental specifications	RK	Operating temperature: 0° ÷ +50°C ▪ storage temperature: -20° ÷ +60°C ▪ humidity: 80% (non-condensing)
	RK10-ET	Operating temperature: -20° ÷ +70°C ▪ storage temperature: -30° ÷ +80°C ▪ humidity: 80% (non-condensing)
	RK11-ET	Operating temperature: -20° ÷ +60°C ▪ storage temperature: -30° ÷ +80°C ▪ humidity: 80% (non-condensing)
Standard warranty		12 months ▪ Warranty management by ASEM headquarters
Only for RK11 / RK11-ET		
Modem	Type	2G/3G/3G+ EDGE/HSPA quadriband modem up to 5,76Mbps upload / 14,4Mbps download ▪ 850MHz-2100MHz
	Antenna	1 x SMA-F connector ▪ no antenna or cable included

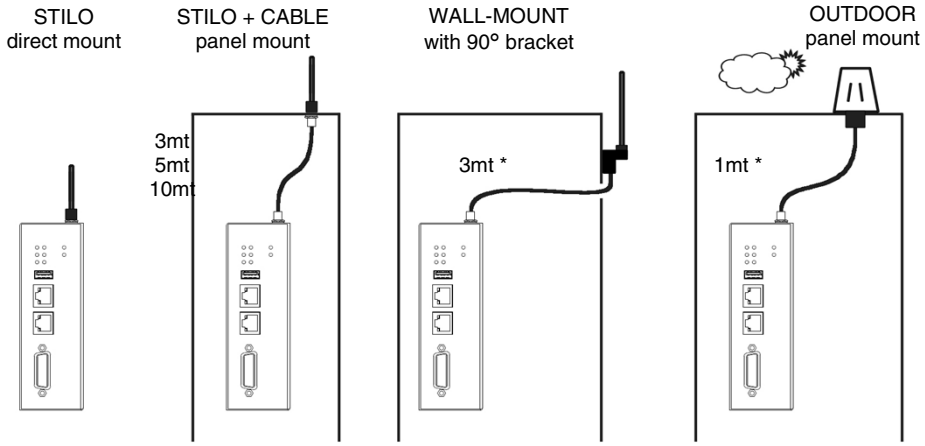
DIMENSIONS (mm)







RK11 / RK11-ET INSTALLATION



* it is possible to add 3, 5 or 10mt extention cables