



**Industrial Automation - Products & Configurations**

<b>RM10 BASIC SYSTEM</b> > note 1		POWER [W]
Basic configuration	ARM Cortex A8, i.MX535, 1 GHz • 1 GB RAM • 256 MB NAND-Flash • 4GB eMMC • Windows Embedded Compact 7 Pro • ASEM UBIQUITY ROUTER runtime • Premium HMI WinCE ADVANCED • ASEM System Manager • DIN-RAIL BOOK or WALL BOOK mounting • 12 months warranty	6

<b>RM11 - 3G BASIC SYSTEM</b> > note 1		POWER [W]
Basic configuration	ARM Cortex A8, i.MX535, 1 GHz • 1 GB RAM • 256 MB NAND-Flash • 4GB eMMC • <b>2G/3G/3G+ modem</b> • without antenna • Windows Embedded Compact 7 Pro • ASEM UBIQUITY ROUTER runtime • Premium HMI WinCE ADVANCED • ASEM System Manager • DIN-RAIL BOOK or WALL BOOK mounting • 12 months warranty	10

<b>RM11 - 4G/LTE BASIC SYSTEM</b> > note 1		CONSUMO [W]
Configurazione base	ARM Cortex A8, i.MX535, 1 GHz • 1 GB RAM • 256 MB NAND-Flash • 4GB eMMC • <b>2G/3G/4G modem</b> • without antenna • Windows Embedded Compact 7 Pro • ASEM UBIQUITY ROUTER runtime • Premium HMI WinCE ADVANCED • ASEM System Manager • DIN-RAIL BOOK or WALL BOOK mounting • 12 months warranty	10

<b>RM11 - 4G/LTE-AM BASIC SYSTEM</b> > note 1		CONSUMO [W]
Configurazione base	ARM Cortex A8, i.MX535, 1 GHz • 1 GB RAM • 256 MB NAND-Flash • 4GB eMMC • <b>2G/3G/4G "AM" version modem</b> • without antenna • Windows Embedded Compact 7 Pro • ASEM UBIQUITY ROUTER runtime • Premium HMI WinCE ADVANCED • ASEM System Manager • DIN-RAIL BOOK or WALL BOOK mounting • 12 months warranty	10

<b>RM10-ET BASIC SYSTEM</b> > note 1		POWER [W]
Basic configuration	ARM Cortex A8, i.MX537, 800 MHz • 512 MB RAM • 256 MB NAND-Flash • 4GB eMMC • Extended Temperature range • Windows Embedded Compact 7 Pro • ASEM UBIQUITY ROUTER runtime • Premium HMI WinCE ADVANCED • ASEM System Manager • DIN-RAIL BOOK or WALL BOOK mounting • 12 months warranty	6

<b>RM11-ET 3G BASIC SYSTEM</b> > note 1		POWER [W]
Basic configuration	ARM Cortex A8, i.MX537, 800 MHz • 1 GB 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 • Premium HMI WinCE ADVANCED • DIN-RAIL BOOK or WALL BOOK mounting • 12 months warranty	10

<b>REMOTE ASSISTANCE</b>	ASEM UBIQUITY Router runtime	-
<b>DATA MONITORING</b>	Premium HMI WinCE ADVANCED runtime	-

**OPTIONS only for RM11 3G-4G/LTE e RM11-ET 3G**

		POWER [W]
<b>3G ANTENNAS</b>	2G/3G/3G+ stilo antenna • RM11 direct mount or panel mount using extention cable • 20W, 50 Ohms • 48mm • SMA-M	-
	2G/3G/3G+ magnetic antenna with <b>2mt</b> cable • panel mount • 50W, 50 Ohm • 116mm Ø29,5mm • SMA-M	-
<b>3G / 4G ANTENNAS</b>	2G/3G/4G stilo steerable antenna • RM11 direct mount or panel mount using extention cable • 10W, 50 Ohm • 72mm • SMA-M	-
	2G/3G/4G wall-mount antenna with <b>3mt</b> cable • wall mount with 90° bracket • IP67 • 2W, 50 Ohm • 250mm • SMA-M	-
	2G/3G/4G outdoor antenna with <b>1mt</b> cable • outdoor panel mount • IP67 • 5W, 50 Ohm • h48mm x Ø50mm • SMA-M	-
<b>CABLES &gt;note 2</b>	<b>3mt</b> extension cable for antennas • RG58/U low loss cable • IP20 • SMA-M/F	-
	<b>5mt</b> extension cable for antennas • RG58/U low loss cable • IP20 • SMA-M/F	-
	<b>10mt</b> extension cable for antennas • RG58/U low loss cable • IP20 • SMA-M/F	-

**COMMON OPTIONS**

<b>WARRANTY EXTENSION</b>	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	

<b>NOTES</b>	
For power consumption calculation we recommend to read the tips on pg. 4. The power values does not include the absorbed power of USB devices connected to the ports.	
<b>1:</b> Price does not include Premium HMI Studio development tool licence that must be purchased one-off at the first order of a license or system that includes the Premium HMI software. See pg.225	
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.222	
<b>2:</b> 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 • Microsoft olographic sticker
Software	Remote assistance ASEM UBIQUITY ROUTER runtime
	Data monitoring Premium HMI WinCE ADVANCED 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 Data logging with local storage and export using Control Center VBA script with multi-threading support Graphic pages access and program by Control Center, Browser or Premium HMI Mobile Alarms management with email or SMS notification (models with integrated modem) Recipes management Gateway features towards more common PLCs and industrial controllers
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	RM ARM Cortex A8 • i.MX535 • 1 GHz, 400 MHz system memory bus
	RM-ET ARM Cortex A8 • i.MX537 • 800 MHz, 400 MHz system memory bus
System memory	512MB / 1GB DDR3-800
Storage memory	NAND-Flash 256MB Read-Only eMMC (Solid State Disk) 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 compatible 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) • cULus LISTED (UL 61010)
Protection grade	IP20
Environmental specifications	RM Operating temperature: 0° ÷ +50°C • storage temperature: -20° ÷ +60°C • humidity: 80% (non-condensing) RM10-ET Operating temperature: -20° ÷ +70°C • storage temperature: -30° ÷ +80°C • humidity: 80% (non-condensing) RM11-ET Operating temperature: -20° ÷ +60°C • storage temperature: -30° ÷ +80°C • humidity: 80% (non-condensing)
Standard warranty	12 months • Warranty management by ASEM headquarters
<b>Only for RM11 3G e RM11-ET 3G</b>	
Modem 4G/LTE	Type 2G/3G/3G+ EDGE/HSPA quadriband modem up to 5,76Mbps upload / 21,6Mbps download Bands UMTS/HSPA+: B1/B2/B5 • GSM/GPRS/EDGE: 850/900/1800/1900 MHz Antenna 1 x SMA-F connector • no antenna included
<b>Only for RM11 4G/LTE</b>	
Modem 4G/LTE	Type 2G/3G/4G LTE pentaband modem up to 50Mbps upload / 100Mbps download Bands FDD-LTE: B1/B3/B7/B8/B20 • TDD-LTE: B38/B40 • UMTS/HSPA+: B1/B8 • GSM/GPRS/EDGE: 900/1800 MHz Antenna 1 x SMA-F connector • no antenna included
Modem 4G/LTE-AM	Type 3G/4G LTE quadriband modem up to 50Mbps upload / 100Mbps download Bands FDD-LTE: B2/B4/B5/B17 • UMTS/HSPA+: B2/B5 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>RM11 3G</b>	<b>RM11 4G/LTE</b>	<b>RM11 4G/LTE-AM</b>
<b>3G</b>	Europe	✓	✓	-
	North/Latin America	✓	-	✓
	Asia	✓	✓	-
	Africa&Oceania	✓	✓	-
<b>4G/LTE</b>	Europe	n.a.	✓	-
	North America	n.a.	-	✓
	Latin America	n.a.	✓	✓
	Asia	n.a.	✓	-
	Africa&Oceania	n.a.	✓	-



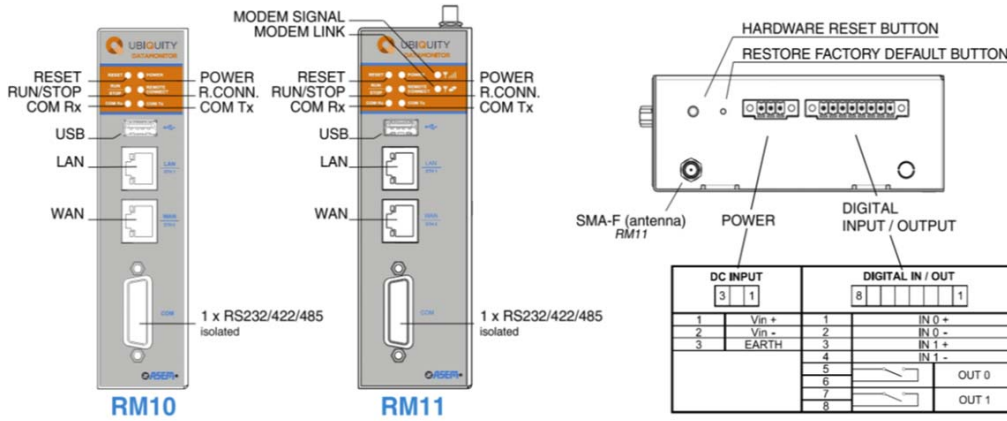
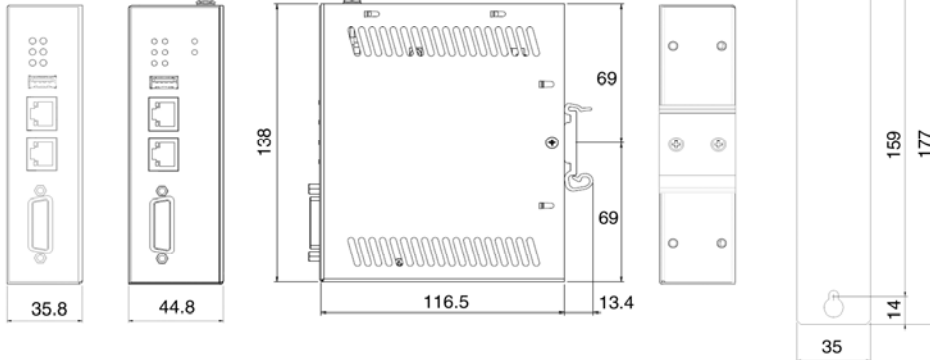
**DIMENSIONS (mm)**

**RM10**

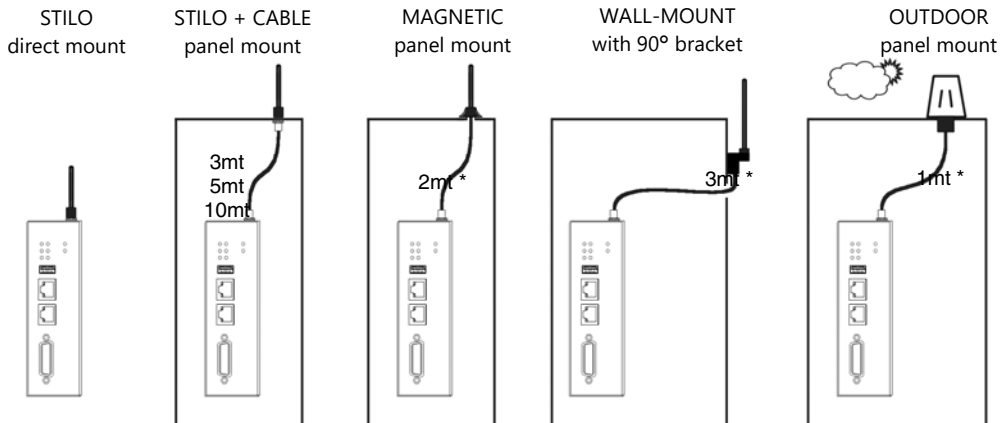
**RK11**

**DIN-RAIL BOOK MOUNTING**  
*default*

**WALL BOOK MOUNTING**



**RM11 3G, RM11 4G/LTE e RM11-ET INSTALLATION**



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