## Industrial Automation - Products & Configurations

| RK10 BASIC SYSTEM > note 1 | |
|---|---|
| Basic configuration | ARM Cortex A8, 1 GHz ▪ 512 MB RAM ▪ 256 MB NAND-Flash ▪ 4GB eMMC ▪ Windows WEC7 ▪ ASEM UBIQUITY ROUTER runtime ▪ ASEM System Manager ▪ DIN-RAIL BOOK or WALL BOOK mounting ▪ 12 months warranty |

| RK11 BASIC SYSTEM > note 1 | |
|---|---|
| Basic configuration | ARM Cortex A8, 1 GHz ▪ 512 MB RAM ▪ 256 MB NAND-Flash ▪ 4GB eMMC ▪ 2G/3G/3G+ modem ▪ without antenna ▪ Windows WEC7 ▪ ASEM UBIQUITY ROUTER runtime ▪ ASEM System Manager ▪ DIN-RAIL BOOK or WALL BOOK mounting ▪ 12 months warranty |
| **PROCESSOR** | ARM Cortex A8 processor ▪ Freescale i.MX535 ▪ 1 GHz ▪ 400Mhz memory bus ▪ Soldered on board |

| RK10-ET BASIC SYSTEM > note 1 | |
|---|---|
| Basic configuration | ARM Cortex A8, 800 MHz ▪ 512 MB RAM ▪ 256 MB NAND-Flash ▪ 2GB eMMC ▪ Extended Temperature range ▪ Windows WEC7 ▪ ASEM UBIQUITY ROUTER runtime ▪ ASEM System Manager ▪ DIN-RAIL BOOK or WALL BOOK mounting ▪ 12 months warranty |

| RK11-ET BASIC SYSTEM > note 1 | |
|---|---|
| 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 WEC7 ▪ ASEM UBIQUITY ROUTER runtime ▪ ASEM System Manager ▪ DIN-RAIL BOOK or WALL BOOK mounting ▪ 12 months warranty |
| **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 | |
|---|---|
| **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 stilo antenna mounted on panel ▪ RG58/U low loss cable ▪ IP20 ▪ SMA-M/F |
| | **5mt** extension cable for stilo antenna mounted on panel ▪ RG58/U low loss cable ▪ IP20 ▪ SMA-M/F |
| | **10mt** extension cable for stilo antenna mounted on panel ▪ RG58/U low loss cable ▪ IP20 ▪ SMA-M/F |

| COMMON OPTIONS | |
|---|---|
| **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 |

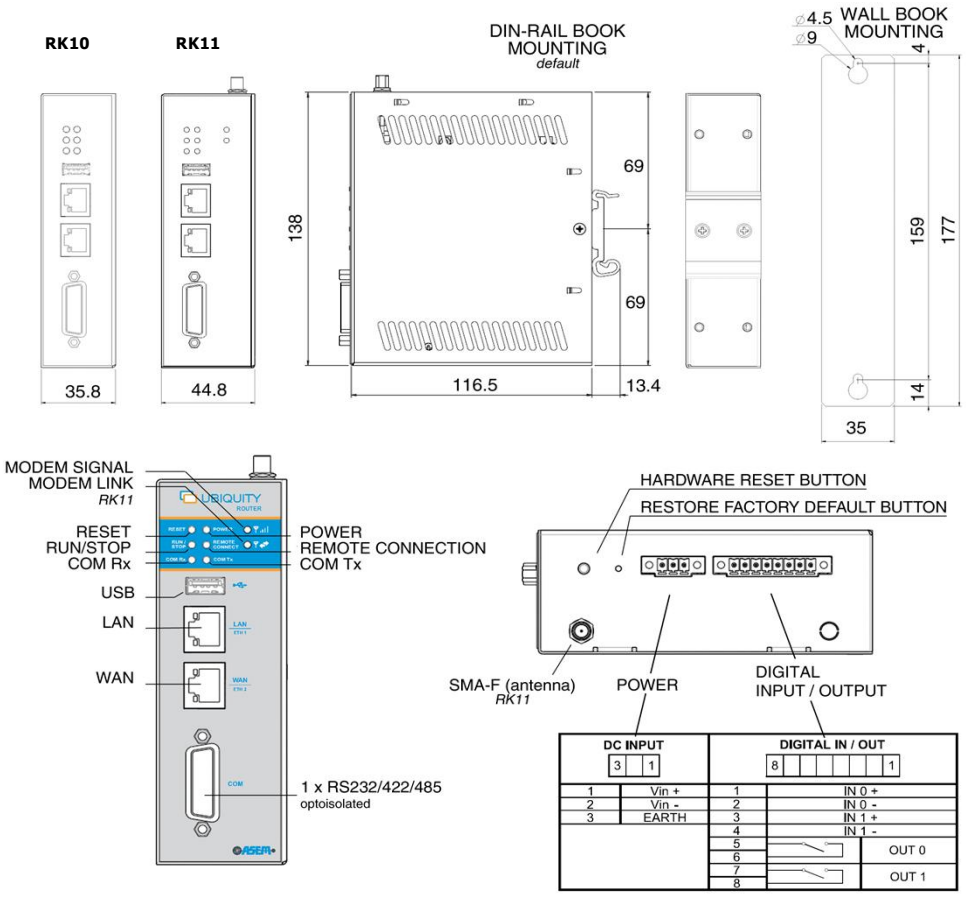
**NOTES**

**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.162

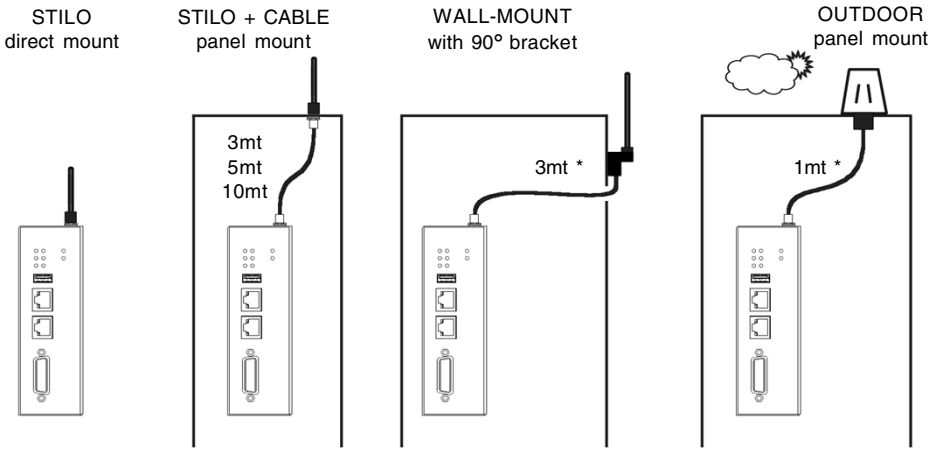
**2:** The efficiency of the antennas and the extension cables is dependent on the quality of the radio frequency signal present at the installation site therefore we suggest not to use more than one extension cable between the antenna and the router.

| 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