# Cellular Routers UMTS/HSPA+ & GPRS/EDGE

Powered by

B-B SMARTWORX



**UR5i V2 Libratum** 



#### **PRODUCT FEATURES**

- 2-port Ethernet switch
- 2 independent LAN
- . Models with Wi-Fi: AP or client mode
- · Dual-SIM fail over
- Antenna Rx Diversity
- Temperature up to +75°C

Balanced UR5iv2 Libratum a UMTS/HSPA+, non-modular wireless router features high speed data rates 14.4 Mbps, two Ethernet 10/100 ports and dual-SIM failover capability for mission critical applications. This router is particularly suited to the demands of the "Transaction Management" industry such as point-of-sale terminals, remote ATMs and vending terminals as well as a huge variety of intelligent remote monitoring and control applications in the Transport, Energy and Security sectors.

#### **Kev Features**

This exceptionally fast UMTS/HSPA+ UR5i v2 Libratum wireless router is equipped with two Ethernet 10/100 ports and two SIM cards. Two SIM cards backup communication in mobile operator network or networks and provide failover to each other. WiFi models are available.

Configuration is done via a web interface protected by password. The 3G UMTS/HSPA+ router supports creation of VPN tunnels using IPsec, OpenVPN and L2TP to assure safe communication. Web interface provides detail statistics about the 3G router activities, signal strength, detailed log, etc. Cellular router supports functions: DHCP, NAT, NAT-T, DynDNS, NTP, VRRP, control by SMS and many other functions.

Other diagnostic functions for continuous communication include automatic inspection of PPP connection offering an automatic restart feature - in case of connection losses, or hardware watchdog which monitors the status of the router. With the help of a start up script window you may insert Linux scripts for various actions.

For some applications the key option is to create several different configurations for one UMTS/HSPA+ wireless router, the so-called profiles (maximum of 4), and the option to switch among them (for example via SMS, binary input status, etc.) is essential. Cellular wireless routers may automatically upgrade configuration and firmware from server. This allows mass reconfiguration of many routers in one time.

#### **SELECTED APPLICATIONS**

Transportation and security
IT and communication
Self-service terminals
Energy and power industry
Meteorology, alarm and warning systems

#### **ORDERING INFORMATION**

Note: Check with your local distributor for availability and options. Contact Advantech B+B SmartWorx distributors.

#### **BB-UR2L610XXX**

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	Accessories	
	0	No Accessories (DIN holder included)
	1 (set)	Accessories with EU power supply
	2 (set)	Accessories with UK power supply
	3 (set)	Accessories with Australia power supply
	4 (set)	Accessories with US power supply
	Enclosure	
	1	Plastic enclosure
	2	Metal enclosure
	WiFi	
	0	No WiFi
	7	WiFi

# Cellular Routers UMTS/HSPA+ & GPRS/EDGE

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#### **SPECIFICATIONS**

INTERFACES	
2× Ethernet	10/100 Mbits, independent or bridged
2× SIM	2 mini SIMs (2FF)

#### ANTENNA

2(3)× SMA connector, 50 0hm

CPU & MEMORY	
CPU	32b ARM microprocessor, 0.25 DMIPS per MHz
Flash memory	16 MB DDR SDRAM
RAM	64 MB
M-RAM	128 kB

TOTAL	
Source	9 - 36 VDC
Consumption	2.3W reception 3.5W (GPRS transmission) 5.5W (UMTS/HSDPA transmission)
MECHANICAL	
Dimension Plastic Version	51 x 87 x 116 mm (DIN 35 mm)
Dimension Metallic Version	42 x 87 x 113 mm (DIN 35 mm)
Protection	IP30
Weight Plastic Version	150g
Weight Metallic Version	280g
ENVIRONMENTAL	
Operating Temperature	-40° to +75°C
Storage Temperature	-40° to +85°C
Humidity	0 to 95%, non-condensing

WIFI *optional		
Antenna connector	R-SMA – 50 Ohms	
Supported WiFi band	2.4 GHz	
Standards	802.11b, 802.11g, 802.11n	
2.4 GHz supported channels	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13	
RX Sensitivity	11b, 11 Mbps: typ85 dBm 11g, 54 Mbps: typ70 dBm (HT20) 11n, MSC7: typ66 dBm (HT40) 11n, MSC7: typ62 dBm	
TX Output Power	11b, 11 Mbps: min. 18, typ. 19, max. 20 dBm 11g, 54 Mbps: min. 14.5, typ. 16, max. 17.5 dBm 802.11n (HT20): min. 13.5, typ. 15, max. 16.5 dBm 802.11n (HT40): min. 13.5, typ. 15, max. 16.5 dBm	
Type of device	Access point, station	

PARAMETERS - HSPA+ MODULE		
HSPA+	Bit rate 14,4 Mbps (DL) / 5,76 Mbps (UL) 3GPP rel. 6/7 standard Data compress 3GPP	
UMTS	Bit rate 384 kbps (DL) / 384 kbps (UL) 3GPP rel. 4 standard	
GPRS/EDGE	EDGE bit rate 237 kbps (DL) / 237 kbps (UL) GPRS bit rate 85,6 kbps (DL) / 85,6 kbps (UL) Multislot class 12, CS 1 to 4, 3GPP rel. 99/4 standard	
Support channels	GSM/GPRS/EDGE: Quad band, 850/900/1800/1900 MHz UMTS/HSDPA/HSUPA/HSPA+: Five band, 800/850/900/1900/2100 MHz	
STANDARDS/REGI	JLATIONS	
	ISO9001, CE, PCT, RoHS	
Telecom/Emission	ETSI EN 301 511 V12.5.1, ETSI EN 300 440 V2.1.1, ETSI EN 301 908-1 V11.1.1, ETSI EN 301 908-2 V11.1.1, ETSI EN 300 328 V2.1.1	
EMC	ETSI EN 301 489-1 V2.1.1, ETSI EN 301 489-3 V2.1.1, Draft ETSI EN 301 489-52 V1.1.0, ETSI EN 301 489-17 V3.1.1	
Safety:	EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + A2:2013 + AC:2011, EN 62311:2008	
E-Mark – EMC for devices in transportation	E-Mark homologation number: 10R – 04 7055	

SOFTWARE FEATURES
Linux based, possibility to program your own application
NTP client, NTP Server – time synchronization
SMS communication – AT commands on RS232, Ethernet and I/O
M-RAM memory inside – router statistic's saving into memory
NETWORKING
DHCP – automatic IP addressing in LAN network
NAT/PAT – IP address and ports translation between inside/outside network
VRRP – virtual backup router function
DynDNS client – access to the router with a dynamic IP address
Dial-in – the ability to communicate over dial CSD call
PPPoE Bridge – PPP frames encapsulation inside ETH frames
VPN TUNNELING
IPsec, OpenVPN, L2TP – secure encrypted tunnels
CONFIGURATION AND DIAGNOSTIC
HTTP server – configuration via web server
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AS/NZS CISPR 32: 2015,

AS/NZS 4268: 2012 Amdt 1-2013

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VPN TUNNELING			
IPsec, OpenVPN, L2TP – secure encrypted tunnels			
CONFIGURATION AND DIAGNOSTIC			
HTTP server – configuration via web server			
Telnet – configuration and access to the file system			
SNMP – router diagnostics, communication with I/O and M-Bus			
GPRS state signalization by LED			
On-line info on GSM signal status (level, cell, neighbors)			
SMS info – power on, GPRS connection or disconnection			
SMS control – on/off GPRS connection, switch SIM, I/O etc.			
Transferred data counting, one more APN as backup			
Remote router group configuration change, switching among configuration profiles			
SSH – encrypted configuration and access to the file system			

RCM - EMC and RF

standards

according to Australian CISPR 32: 2015,

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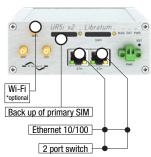


ACCESSORIES		INCLUDED IN PACKAGE	INCLUDED IN SET PACKAGE	SOLD SEPARATELY
ORDER CODE	DESCRIPTION			
BB-SBD40	Metal DIN holder for Metal versions of routers v2	~	~	~
BB-CPD2-G	Plastic DIN holder		~	~
BB-TG.09.0113	Antenna GSM/UMTS stick 2dB - Penta-band, SMA-M connector		~	~
BB-AO-AUMTS-M3S	Antenna GSM/UMTS magnetic 3dB - Quad-band, 3m cable, SMA-M connector		~	~
BB-AO-AGSM-MG9S	Antenna GSM/UMTS magnetic 9dB - Quad-band, 3,5m cable, SMA-M connector			~
BB-AW-A24G-M5SRP	Antenna WiFi stick 5dB, SMA-RP connector		~	~
BB-KD-ETH	Ethernet cross cable 1.5m		~	~
BB-CON-WR2	2-pin Terminal block for Power Supply	<b>~</b>		~
BB-RPS-v2-WR2-EU	Power supply with WR connector (2 pins) - 12V/1A - EU plug		~	~
BB-RPS-v2-WR2-US	Power supply with WR connector (2 pins) - 12V/1A - US plug		~	~
BB-RPS-v2-WR2-UK	Power supply with WR connector (2 pins) - 12V/1A - UK plug		<b>~</b>	~
BB-RPS-v2-WR2-AUS	Power supply with WR connector (2 pins) - 12V/1A - AUS plug		•	~
Quick Start Guide		•	<b>~</b>	

#### **UR5i v2 LIBRATUM**

2× SIM card holder 2× LAN port, Wi-Fi optional





### R-SEENET™

Router Management Software consisting of two parts:

- R-SeeNet Server application can be programmed to automatically send SNMP queries (Simple Network Management Protocol) to each router defined in the network. The application retrieves status information from the routers and records it in the SQL database.
- R-SeeNet PHP is a web-based application that accesses the SQL database and provides the network administrator detailed information on individual routers and network health.

### **SMARTWORX HUB™**

SmartWorx HUB takes management of your devices to new levels of flexibility and efficiency. Giving you a complete view of your installed device population, SmartWorx Hub delivers invaluable configuration, diagnostic and management facilities directly to your desktop, wherever you are.

Manage a single device or your entire device population at the same time. Whether you need to modify configuration parameters, download or upgrade installed firmware and applications or view detailed information regarding network statistics, you can do it all from any location.

# **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

# Advantech:

UR2L610710

# B+B SmartWorx:

<u>UR2L610021 UR2L610020 UR2L610031 UR2L610720 UR2L610021-SWH UR2L610011-SWH UR2L610014 UR2L610711 UR2L610711-SWH UR2L610721 UR2L610714-SWH UR2L610714 UR2L610011 UR2L610014-SWH UR2L610010</u>