Cellular Routers
UMTS/HSPA+ & GPRS/EDGE
UR5i V2 Libratum

B+B SMARTWORX

Powered by **ADVANTECH**

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.

Key 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.

ORDERING INFORMATION
Note: For more configuration information, contact Advantech B+B SmartWorx or your local distributor. A specification configurator is available online.

MODEL NUMBER	ETH 10/100	SIM	WIFI	PLASTIC CASE	METAL CASE
BB-UR5i v2 Libratum	2	2		X	
BB-UR5i v2 Libratum WiFi	2	2	1	X	
BB-UR5i v2 Libratum SL	2	2			X
BB-UR5i v2 Libratum WiFi SL	2	2	1		X

Europe, Middle East, Africa, Asia, South America, Latin America.
Check with your local distributor for availability and options.

ACCESSORIES

BB-SBD40	Metal DIN holder for Metal versions of routers v2
BB-CPD2-G	Plastic DIN holder for all Plastic versions of routers v2 excluding LR77 v2
BB-AO-AGSM-TG09	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
BB-RPS-v2-WR2-X	Power supply with WR connector (2 pins) - 12V/1A X = EU - EU plug X = US - US plug X = UK - UK plug X = US - AUS plug
BB-KN-WR2-3	Power supply cable 2-wire, 3m

SELECTED APPLICATIONS

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

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UR5i V2 Libratum

SPECIFICATIONS

INTERFACES

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

ANTENNA

2x SMA connector, 50 Ohm	

32B ARM MICROPROCESSOR

Memory	512 Mb DDR SDRAM 128 Mb FLASH 1 Mb MRAM

POWER

Source	9 - 36 VDC
Consumption	2.3W reception 3.5W (GPRS transmission) 5.5W (UMTS/HSDPA transmission)

MECHANICAL

Dimensions	Plastic box - 51 x 87 x 116 mm (DIN 35 mm) Metal box - 42 x 87 x 113 mm (DIN 35 mm)
Protection	IP30
Weight	UR5i v2 Libratum – 150 g UR5i v2 Libratum SL – 280 g

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: typ. -85 dBm 11g, 54 Mbps: typ. -70 dBm (HT20) 11n, MSC7: typ. -66 dBm (HT40) 11n, MSC7: typ. -62 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

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.

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/REGULATIONS

	ISO9001, CE, PCT, RoHS
Telecom/Emission	ETSI EN 300 440-2 v1.4.1, ETSI EN 301 511 v9.0.2, ETSI EN 301 908-1 v6.2.1, ETSI EN 301 908-2 v5.4.1
EMC	ETSI EN 301 489-1 v1.9.2, ETSI EN 301 489-3 v1.6.1, ETSI EN 301 489-24 v1.5.1
Safety:	EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + A2:2013, EN 62311:2008
E8 - EMC for Devices for Transportation	E8 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

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

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