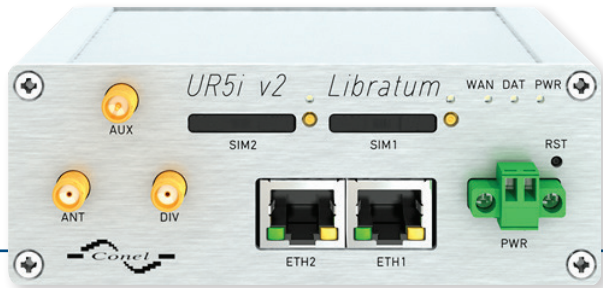# Cellular Router
UMTS/HSPA+ & GPRS/EDGE

UR5i V2 Libratum Balanced Router

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 +85°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.

SELECTED APPLICATIONS

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

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	I/O	WIFI	PLASTIC CASE	METAL CASE
UR5i v2 Libratum set	2	2	1		X	
UR5i v2 Libratum WiFi set	2	2	1	1	X	
UR5i v2 Libratum SL set	2	2	1			X
UR5i v2 Libratum WiFi SL set	2	2	1	1		X

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

ACCESSORIES

MDR-40-24	24VDC, 20W, 1 A power supply
C5UMB3FBG	Category 5E UTP 1 m (3 ft)- Beige
C5UMB10FBL	Category 5E 3m (10 ft) - Blue

R-*SEE*NET™

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 web-based application that accesses the SQL database and provides the Network Administrator detailed information on individual routers and network health.

SMART*CLUSTER*™

SmartCLUSTER is an OpenVPN server for creating safe private network communication systems via the internet. Configure multiple routers/LANs via the same VPN tunnel. Create router configuration files and secure OpenVPN tunnel certificates. Monitor connection status.

Cellular Router
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UR5i V2 Libratum Balanced Router

SPECIFICATIONS

INTERFACES

Ethernet 2x	10/100 Mbits, independent or bridged
SIM 1	SIM Card
SIM 2	SIM Card

ANTENNA CONNECTORS

SMA – 50 Ohm	

FREQUENCY BANDS

Quad Band HSPA+ 850/900/1900/2100 MHz
Quad Band GSM 850/900/1800/1900 MHz

HSPA+ PARAMETERS

Bit rate 14.4 Mbps / 5,76 Mbps
3GPP rel. 6/7 standard
Data compress 3GPP

UMTS PARAMETERS

Download – 384 kbps
Upload – 384 kbps
3GPP rel. 6/7 standard

EDGE/GPRS PARAMETERS

Bit rate EDGE 237 kbps / 237 kbps
Bit rate GPRS 85,6 kbps / 85,6 kbps
Multislot class 12, CS 1 to 4, 3GPP rel. 99/4 standard

WIFI

802.11b, 802.11g, 802.11n
Security - 64/128 WEP, TKIP, AES
Authentication - Shared, WPA-PSK, WPA2-PSK

POWER

Source	9 – 36 VDC
Consumption	Reception: 2.3W GPRS: To 3.5W (GPRS transmission) UMTS: To 5.5W (UMTS/HSDPA transmission)

MECHANICAL

Dimensions	Plastic version - 50 x 83 x 116 mm Metallic (SL) version - 42 x 80 x 113 mm
Protection	IP20

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

FEATURES

DHCP – automatic IP addressing in LAN network
NAT – IP address and ports translation between inside/outside network
Firewall – filtering of addresses, ports, protocols
VRRP – virtual backup router function
DynDNS client – access to the router with a dynamic

NETWORKING

IP address
VLAN 802.11Q – virtual LAN
QoS – quality of service
Dial-in – Communicate via CSD call
NTP client, NTP Server: time synchronization
PPPoE Bridge – PPP frames encapsulation inside ETH frames

VPN TUNNELING

IPSec, Pre-Shared key, Username/Password, X.509,
Initiator - Responder (DES, 3DES, AES, MD5, SHA-1, DH-2,5,14-18)

OpenVPN, Pre-Shared key, Username/Password, X.509,
Server/Client/Multiclient (BF-CBC, AES128, DES3DES)

L2TP, PPTP, simple tunnel with Username/Password auth.

EasyVPN, simple tunnel with Username/Password auth.

GRE, simple tunnel without security measures

DIAGNOSTIC

Status Network all information about active interface
Status DHCP status of DHCP server
Status UMTS/GPRS mobile network information, statistic
Status IPSec status of IPSec
System Log list of system messages
SNMP traps with R-SeeNET

APPROVALS/ CERTIFICATIONS

CE	EN 301 511, v9.0.2 EN 301 908-1&2, v3.2.1 ETSI EN 301 489-1 V1.8.1 EN 60950-1:06 ed.2 + A11:09 + A1:10
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 in transportation) E8 homologation number: 10R – 04 7055