

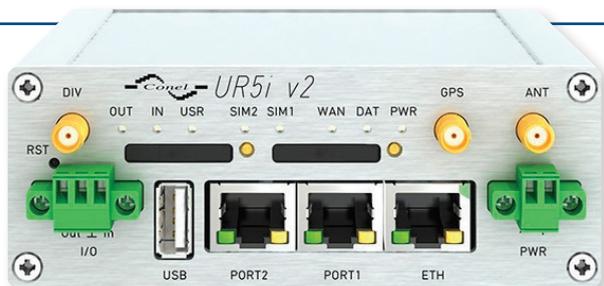
Cellular Routers 3G UMTS/HSPA+

UR5i v2 Series

B+B SMARTWORX

Powered by

ADVANTECH



PRODUCT FEATURES

- Designed for M2M applications
- WiFi, M-BUS and Modbus TCP / Modbus RTU
- Modular design to fit application requirements
- Single or dual SIM cards for redundant backhaul
- Up to 5.7 Mbps upload to 21.1 Mbps download
- LINUX platform & advanced networking functions
- 'C' based dev environment to build user applications

3G UMTS/HSPA routers, UR5i v2 series, are used to wirelessly connect various equipment and devices via Ethernet 10/100 to the Internet or intranet. High data transfer speed of up to 14.4 Mbit/s (download) and upload speed up to 5.76 Mbit/s, make it an ideal wireless solution for traffic and security camera systems, individual computers, LAN networks, automatic teller machines (ATM) and other self-service terminals, etc.

Key features

This exceptionally fast 3G UR5i v2 wireless router is equipped with one Ethernet 10/100, one USB Host port, one binary Input/Output (I/O) port and one SIM card. To save and backup communication data, a version with 2 x SIM cards is available. A wide range of user-defined interface options further expands optional Port1 and Port2. (EX: Ethernet port 10/100, serial interface ports RS232/RS485/RS422/M-Bus/WiFi or (I/O - CNT). Port2 may be equipped with serial interfaces RS232/RS485/RS422/M-Bus or (I/O - CNT). Routers are available in either plastic or metal casings. FULL version of the router is equipped with GPS.

Configuration is done via protected password web interface. The 3G UMTS/HSPA+ router supports VPN tunnel creation using IPsec, OpenVPN and L2TP to ensure safe communication. Web interface provides statistics about 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 ensuring continuous communication include automatic inspection of PPP connection offering an automatic restart feature in case of connection losses, and 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 and, for some applications the option to create several different configurations for one 3G wireless router, profiles (maximum of 4), and the option to switch between them (for example via SMS, binary input status, etc.). Cellular wireless routers can automatically upgrade configuration and firmware from server. This allows mass reconfiguration of multiple routers at one time.

SELECTED APPLICATIONS

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

ORDERING INFORMATION

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

MODEL NUMBER	ETH 10/100	USB	SIM	RS232	RS485/RS422	M-BUS	I/O	I/O (CNT)	WIFI	GPS
Basic Versions:										
UR5i v2B Set	1	1	1					1		
UR5i v2B ETH Set	2	1	1					1		
UR5i v2B RS232 Set	1	1	1	1				1		
UR5i v2B RS485/422 Set	1	1	1		1			1		
UR5i v2B M-Bus Set	1	1	1			1		1		
UR5i v2B CNT Set	1	1	1					1	1	
Full Versions:										
UR5i v2F Set	1	1	2					1		1
UR5i v2F ETH Set	2	1	2					1		1
UR5i v2F RS232 Set	1	1	2	1				1		1
UR5i v2F RS485/422 Set	1	1	2		1			1		1
UR5i v2F M-Bus Set	1	1	2			1		1		1
UR5i v2F CNT Set	1	1	2					1	1	1
UR5i v2F SWITCH Set	3	1	2					1		1
UR5i v2F WIFI Set	1	1	2					1		1
Add "SL" suffix	Router metal enclosure (example: LR77 v2B SL)									

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 3 m (10 ft) - Blue

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

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UR5i v2 Series



SPECIFICATIONS

INTERFACES	
Ethernet	10/100 Mbps, independent or bridged
SIM	SIM Card
I/O	Binary input/output
USB	USB 2.0 Host, Type A
2 Optional Ports	
Port 1	Ethernet (10/100Mbps) RS232 RS422/485 M-Bus I/O Input/Output
Port 2	RS232 RS422/485 M-Bus WiFi
Optional	2nd SIM Card holder
ANTENNA CONNECTORS	
SMA – 50 Ohm	
FREQUENCY BANDS	
Five Band UMTS (WCDMA): 800, 850, 900, 1900, 2100 MHz	
Quad-Band GSM/GPRS/EDGE: 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	
POWER	
Source	9– 36 VDC
Consumption	Reception: 2.6W GPRS: To 3.5W (GPRS transmission) LTE: To 5.5W (LTE transmission)
ENVIRONMENTAL	
Operating Temperature	-40° to +75°C
Storage Temperature	-40° to +85°C

ENCLOSURE	
Dimensions	Plastic casing: 51 x 87 x 116 mm Metal (SL) casing: 42 x 80 x 113 mm
Protection	IP20
WEIGHT	
UR5i v2 – 150 g. UR5i v2 SL – 280 g	
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	
GRE tunnel – simple tunnel without security measures	
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 #le system	
APPROVALS/CERTIFICATIONS	
Telecom / Emission	ETSI EN 301 511 v9.0.2, ETSI EN 301 908-1 v6.2.1, ETSI EN 301 908-2 v5.4.1, ETSI EN 300 440-2 v1.4.1
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
E8	(EMC for devices in transportation) E8 homologation number: 10R – 04 7056

MECHANICAL DIAGRAM

Dimensions are in mm

