

# Industrial Routers LAN ROUTER

XR5i v2F Series

B+B SMARTWORX

Powered by

ADVANTECH



## PRODUCT FEATURES

- Modular design to fit application requirements
- Provided secure connection between two networks
- Provides USB, Serial and I/O connectivity
- SNMP protocol for remote management
- VPN support

The XR5i v2F industrial router secures connections between two local networks (LAN) via two Ethernet interfaces 10/100. The XR5i v2F can also convert serial RS232, RS485, M-BUS, I/O to IP local area network (LAN Ethernet 10/100). WiFi models are available.

The XR5i v2F Industrial router will also connect two devices with different serial interfaces (RS232, RS485, M-Bus, I/O, etc.) to the local network. In this configuration, the communication device has an Ethernet 10/100 port and two serial interfaces which user definable. A third option uses combination of two previous versions, when the industrial XR5i v2F router equipped with two Ethernet interfaces 10/100 and one optional serial interface. Standard on the XR5i v2F Industrial Router is one Ethernet 10/100 port, one USB A (host) port, I/O port and two optional interfaces. Users can select a second Ethernet port, 10/100, serial interface RS232/RS485/RS422/MBUS or other Inputs/Outputs (I/O). Industrial XR5i v2F router can be ordered with either a plastic or metal housing.

Configuration is password protected, via web interface. The router supports creation of VPN tunnels using IPsec, OpenVPN and L2TP to ensure safe communication. Web interface provides detail statistics about router activities.

## SELECTED APPLICATIONS

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

## 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.

## ORDERING INFORMATION

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

Europe, Middle East, Africa, Asia, South America, Latin America.

BB - XR2F00XXXX

### Accessories

|   |   |
|---|---|
| 0 | No Accessories                          |
| 1 | Accessories with EU power supply        |
| 2 | Accessories with UK power supply        |
| 3 | Accessories with Australia power supply |
| 4 | Accessories with US power supply        |

### Enclosure

|   |                   |
|---|-------------------|
| 1 | Plastic enclosure |
| 2 | Metal enclosure   |

### PORT2

(Full version only)

|   |                                  |
|---|----------------------------------|
| 0 | No expansion port                |
| 1 | ETH                              |
| 2 | RS232                            |
| 3 | RS485                            |
| 4 | RS422                            |
| 5 | MBUS                             |
| 6 | CNT (4× BI, 2×, 1×B0) - I/O port |
| 7 | WiFi                             |
| 8 | WMBUS (Wireless M-BUS)           |

### PORT1

|   |                                  |
|---|----------------------------------|
| 0 | No expansion port                |
| 1 | ETH                              |
| 2 | RS232                            |
| 3 | RS485                            |
| 4 | RS422                            |
| 5 | MBUS                             |
| 6 | CNT (4× BI, 2×, 1×B0) - I/O port |
| 9 | Switch                           |

## 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.

# Industrial Routers LAN ROUTER

XR5i v2F Series



## SPECIFICATIONS

### FIXED INTERFACES

|             |                                     |
|-------------|-------------------------------------|
| 1× Ethernet | 10/100 Mbps, independent or bridged |
| 1× I/O      | Binary input/output                 |
| 1× USB      | USB 2.0 Host, Type A                |

### OPTIONAL INTERFACES

|           |  |
|-----------|--|
| 1× PORT 1 | Ethernet (10/100Mbps), RS232, RS422/485, M-Bus I/O Input/Output, Ethernet Switch (with PORT 2) |
| 1× PORT 2 | RS232, RS422/485, M-Bus, WM-Bus, SDH, WiFi Ethernet Switch (with PORT 1)                       |

### POWER

|             |  |
|-------------|--|
| Source      | 9 - 36 VDC   |
| Consumption | Idle - 1.6 W<br>WiFi Com. to 1.9 W<br>Full Com. to 2.5 W |

### MECHANICAL

|                            |                 |
|----------------------------|-----------------|
| Dimension Plastic version  | 51 x 87 x 116mm |
| Dimension Metallic version | 42 x 87 x 113mm |
| Protection                 | IP30            |
| Weight Plastic version     | 150 g           |
| Weight Metallic version    | 280 g           |

### ENVIRONMENTAL

|                       |  |
|-----------------------|--|
| Operating Temperature | -40 to +75°C   |
| Storage Temperature   | -40° to +85°C  |
| Humidity              | Operating - 0 to 95% relative humidity non condensing<br>Storage - 0 to 95% relative humidity non condensing |

### I/O PORT

|               |   |
|---------------|---|
| Binary input  | Reed contact with trigger level 1.3 up to 1.4 V |
| Binary output | 100 mA/ max. 30 V                               |

### CPU & MEMORY

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

### SOFTWARE FEATURES

|   |
|---|
| Linux based, possibility to program your own application    |
| NTP client, NTP Server – time synchronization               |
| 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                 |

### STANDARDS/REGULATION

|        |   |
|--------|---|
| EMC    | ETSI EN 301 489-1 V2.1.1, ETSI EN 301 489-17 V3.1.1, ETSI EN 301 489-3 V2.1.1 |
| Safety | EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + A2:2013 + AC:2011           |

### WiFi <sup>optional</sup>

|                            |  |
|----------------------------|--|
| 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<br>11g, 54 Mbps: typ. -70 dBm<br>(HT20) 11n, MCS7: typ. -66 dBm<br>(HT40) 11n, MCS7: typ. -62 dBm   |
| TX Output Power            | 11b, 11 Mbps: min. 18, typ. 19, max. 20 dBm<br>11g, 54 Mbps: min. 14.5, typ. 16, max. 17.5 dBm<br>802.11n (HT20): min. 13.5, typ. 15, max. 16.5 dBm<br>802.11n (HT40): min. 13.5, typ. 15, max. 16.5 dBm |
| Type of device             | Access point, station  |

## ACCESSORIES

| ORDER CODE        | DESCRIPTION   | INCLUDED IN PACKAGE | INCLUDED IN SET PACKAGE | SOLD SEPARATELY |
|-------------------|---|---------------------|-------------------------|-----------------|
| BB-SBD40          | Metal DIN holder for Metal versions of routers v2           | ✓                   | ✓                       | ✓               |
| BB-CPD2-G         | Plastic DIN holder for Plastic versions of routers v2       | ✓                   | ✓                       | ✓               |
| BB-AW-A24G-M5SRP  | Antenna WiFi stick 5dB, SMA-RP connector                    |                     | ✓                       | ✓               |
| BB-KD-ETH         | Ethernet cross cable 1.5m                                   |                     | 2x                      | ✓               |
| BB-CON-WR2        | 2-pin Terminal block for Power Supply                       | ✓                   |                         | ✓               |
| BB-CON-WR3        | 3-pin terminal block for I/O                                | ✓                   | ✓                       | ✓               |
| 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  |                     | ✓                       | ✓               |
| BB-RPS-v2-WR2-AUS | Power supply with WR connector (2 pins) - 12V/1A - AUS plug |                     | ✓                       | ✓               |
| BB-KN-WR2-3       | Power supply cable 2-wire, 3m                               |                     | ✓                       | ✓               |
| Quick Start Guide |   | ✓                   | ✓                       |                 |



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.