

# ADVANTECH



## Band Select



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# Used symbols



*Danger* – Information regarding user safety or potential damage to the router.



*Attention* – Problems that can arise in specific situations.



*Information* – Useful tips or information of special interest.



*Example* – Example of function, command or script.

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# 1. Changelog



This Router App has been tested on a router with firmware version 6.3.10. After updating the router's firmware to a higher version, make sure that a newer version of the Router App has not also been released, as it is necessary to update it as well for compatibility reasons.

## 1.1 Band Select Changelog

### v1.0.3 (2014-04-14)

- First release.

### v1.0.4 (2014-09-11)

- Added support for module MC7304, improved support of MC7710 and added support for Bivias LL.

### v1.0.5 (2015-01-21)

- Fixed band selecting for MC7304.

### v1.0.6 (2015-06-24)

- Added setting bands to default when modul is removing.

### v1.0.7 (2016-01-05)

- Fixed setting for PHS8.

### v1.1.0 (2017-11-02)

- Added support of modules PLS8-E, PLS8-X, MPL200, LE910-EU V2, EC25-AU, EC25-E, ME909s-120, ME909s-821.

### v1.2.0 (2019-04-16)

- Added support of modules EC25-AF, EC25-EU, BG96, LE910-NA1.

### v1.2.1 (2019-08-19)

- Fixed identification of PLS8-E modules.

### v1.3.0 (2020-10-01)

- Updated CSS and HTML code to match firmware 6.2.0+.

### v1.4.0 (2021-07-07)

- Added support of modules PLS83-EP, PLS83-W, PLS83-X, EC25-EUX.
- Added support of module RM505Q-AE.

### v1.4.1 (2021-07-16)

- Fixed item naming.

### v1.5.0 (2021-10-01)

- Added support of module EM12-G.

### **v1.5.1 (2022-01-04)**

- Fixed dysfunction on V2i, default settings after unistalling and added restart of ppp to MPL200.

### **v1.6.0 (2022-11-03)**

- Reworked license information.

### **v1.7.0 (2022-11-22)**

- Added support of RM520N-GL.

### **v1.7.1 (2023-02-01)**

- Added support of module BG95-M3.

### **v1.7.2 (2023-02-09)**

- Added support of module SIM7070.

### **v1.8.0 (2023-11-03)**

- Reworked startup behavior.
- Fixed EC25 modules.

## 2. Description of Router App



Please use this router app with caution and observe the legal restrictions.



This router app is not installed on *Advantech* routers by default. Uploading of this router app is described in the Configuration Manual (see Chapter [Related Documents](#)).

**Please note that this router app is intended only for routers with following cellular modules:**

- **Celient**
  - MPL200
- **Cinterion**
  - PHS8-E
  - PHS8-P
  - PLS8-E
  - PLS8-X
  - PLS83-EP
  - PLS83-W
  - PLS83-X
- **Huawei**
  - ME909s-120
  - ME909s-821
- **Quectel**
  - BG95-M3
  - BG96
  - EC20-CE
  - EC25-AF
  - EC25-AU
  - EC25-E
  - EC25-EU
  - EC25-EUX
  - EM12-G
  - RM505Q-AE
  - RM520N-GL
- **Sierra Wireless**
  - MC7304
  - MC7710
  - MC8705

- **Telit**
  - LE910–EU V2
  - LE910–NA1
- **SIMCom**
  - SIM7070

Type of the cellular module installed in the router can be found in the *Mobile WAN* status in the *Mobile Network Information* part.

*Band Select* module allows user to adjust the portfolio of frequency bands which router supports. What are frequency bands? Frequency bands are groupings of radio frequencies that are used by mobile networks to communicate. For example for cellular network in Europe are used frequency bands 900 MHz and 1800 MHz. For cellular network in USA is mainly used frequency band 1900 MHz. So for a router to work properly in USA as well as in Europe, it would need to support the 1900 MHz band and one or both of the 900 MHz or 1800 MHz bands used in Europe.

## 2.1 Web Interface

The web interface available for configuration of the *Band Select* router app can be invoked by pressing the module name on the *Router apps* page of the router's web interface. The left part of the web interface (i.e. menu) contains only the *Return* item, to switch back to the router's web interface. In case of routers with two cellular modules, there are *Modul 1* and *Modul 2* items available to manage both cellular modules of the router separately.

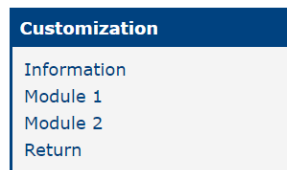


Figure 1: Menu of the Band Select router app for a router with two cellular modules

The actual configuration of the *Band Select* router app is performed via the form on the right of the web interface. The possible configuration is displayed according to the cellular module installed in the router. To keep the bands limited, router app must be installed and enabled. Choose the desired frequency bands for the module, select *Enable Band Select* and then confirm with the *Send* button.



## 2.2 Examples for a Few Cellular Modules

### Band select

Customization	Band select !!use carefully!!
Information Module 1 Return	<input type="checkbox"/> Enable Band select <hr/> Module 1 type: PLS83-EP <hr/> GSM <input checked="" type="checkbox"/> GSM-850 (850 MHz) <input checked="" type="checkbox"/> GSM-900 (900 MHz) <input checked="" type="checkbox"/> GSM-1800 (1800 MHz) <input checked="" type="checkbox"/> GSM-1900 (1900 MHz) <hr/> UMTS <input checked="" type="checkbox"/> B1 (2100 MHz) <input checked="" type="checkbox"/> B3 (1800 MHz) <input checked="" type="checkbox"/> B8 (900 MHz) <hr/> LTE <input checked="" type="checkbox"/> B1 (2100 MHz) <input checked="" type="checkbox"/> B3 (1800 MHz) <input checked="" type="checkbox"/> B5 (850 MHz) <input checked="" type="checkbox"/> B7 (2600 MHz) <input checked="" type="checkbox"/> B8 (900 MHz) <input checked="" type="checkbox"/> B20 (800 MHz) <input checked="" type="checkbox"/> B28 (700 MHz) <hr/> <input type="button" value="Send"/>

Figure 2: Configuration form for module PLS8-E

### Band select

Customization	Band select !!use carefully!!
Information Module 1 Return	<input checked="" type="checkbox"/> Enable Band select <hr/> Module 1 type: EC25-AU <hr/> GSM <input checked="" type="checkbox"/> GSM-850 (850 MHz) <input checked="" type="checkbox"/> GSM-900 (900 MHz) <input checked="" type="checkbox"/> GSM-1800 (1800 MHz) <input checked="" type="checkbox"/> GSM-1900 (1900 MHz) <hr/> UMTS <input checked="" type="checkbox"/> B1 (2100 MHz) <input checked="" type="checkbox"/> B2 (1900 MHz) <input checked="" type="checkbox"/> B5 (850 MHz) <input checked="" type="checkbox"/> B8 (900 MHz) <hr/> LTE <input checked="" type="checkbox"/> B1 (2100 MHz) <input checked="" type="checkbox"/> B2 (1900 MHz) <input checked="" type="checkbox"/> B3 (1800 MHz) <input checked="" type="checkbox"/> B4 (2132 MHz) <input checked="" type="checkbox"/> B5 (850 MHz) <input checked="" type="checkbox"/> B7 (2600 MHz) <input checked="" type="checkbox"/> B8 (900 MHz) <input checked="" type="checkbox"/> B28 (700 MHz) <input checked="" type="checkbox"/> B40 (2300 MHz) <hr/> <input type="button" value="Send"/>

Figure 3: Configuration form for module EC25AU

### Band select

Customization	Band select !!use carefully!!
Information Module 1 Return	<input type="checkbox"/> Enable Band select <hr/> Module type: MC8705 All bands <input checked="" type="radio"/> GSM 900/1800 <input type="radio"/> GSM All <input type="radio"/> WCDMA All <input type="radio"/> WCDMA 900/2100 <input type="radio"/> <hr/> <input type="button" value="Send"/>

Figure 4: Configuration form for module MC8705

## 3. Related Documents

You can obtain product-related documents on *Engineering Portal* at [icr.advantech.com](http://icr.advantech.com) address.

To get your router's *Quick Start Guide*, *User Manual*, *Configuration Manual*, or *Firmware* go to the [Router Models](#) page, find the required model, and switch to the *Manuals* or *Firmware* tab, respectively.

The *Router Apps* installation packages and manuals are available on the [Router Apps](#) page.

For the *Development Documents*, go to the [DevZone](#) page.