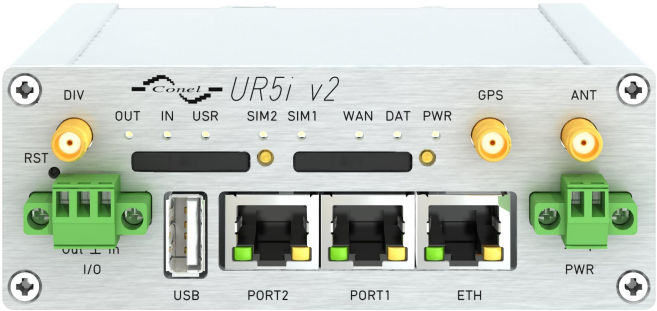
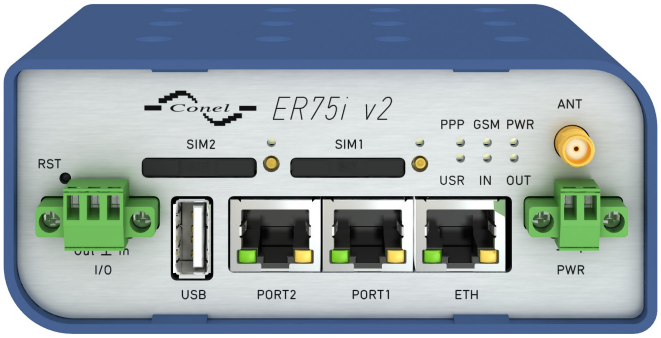
User module

Band Select

APPLICATION NOTE





B+B SMARTWORX

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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, notice – Useful tips or information of special interest.

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1. Description of user module

User module *Band Select* is not contained in the standard router firmware. Uploading of this user module is described in the Configuration manual (see [1]).

Please note – this user module is intended only for routers with GSM modules:

- **Cinterion**
  - PHS8–E
  - PHS8–P
  - PLS8–E
  - PLS8–X
- **Sierra Wireless**
  - MC7304
  - MC7710
  - MC8705
- **Celient**
  - MPL200
- **Telit**
  - LE910–EU V2
- **Huawei**
  - ME909s–120
  - ME909s–821

Type of the GSM 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 GSM network in Europe are used frequency bands 900 MHz and 1800 MHz. For GSM network in USA is mainly used frequency band 1900 MHz. So for a router to work properly in USA as well as work in Europe, it would need to support the 1900 MHz band and one or both of the 900 MHz and 1800 MHz bands used in Europe.

1.1 Web interface

The web interface available for configuration of the *Band Select* user module can be invoked by pressing the module name on the *User modules* 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 Bivias routers, there are *Modul 1* and *Modul 2* items available to manage both GSM modules of Bivias router separately.

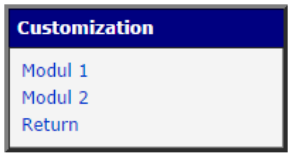

Figure 1: Menu of the Band Select user module – in case of Bivias router

The actual configuration of the *Band Select* user module is performed via the form on the right of the web interface. The possible configuration is displayed according to the GSM module installed in the router. The module must using activated by *Enable Band Select*. Choose the desired frequency bands for the module and then confirm with the *Send* button.

1.2 Display examples:

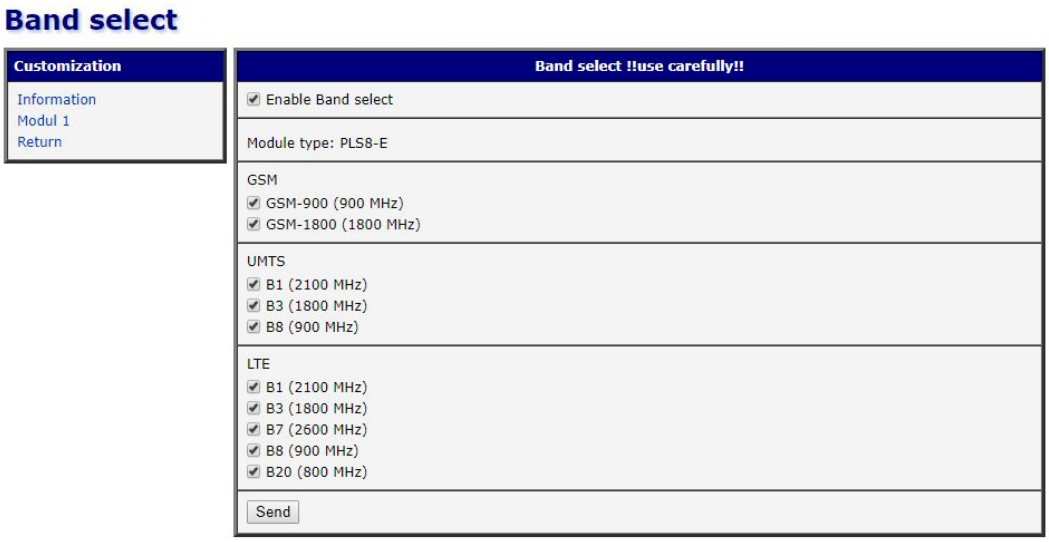

Figure 2: Configuration form – module PLS8-E

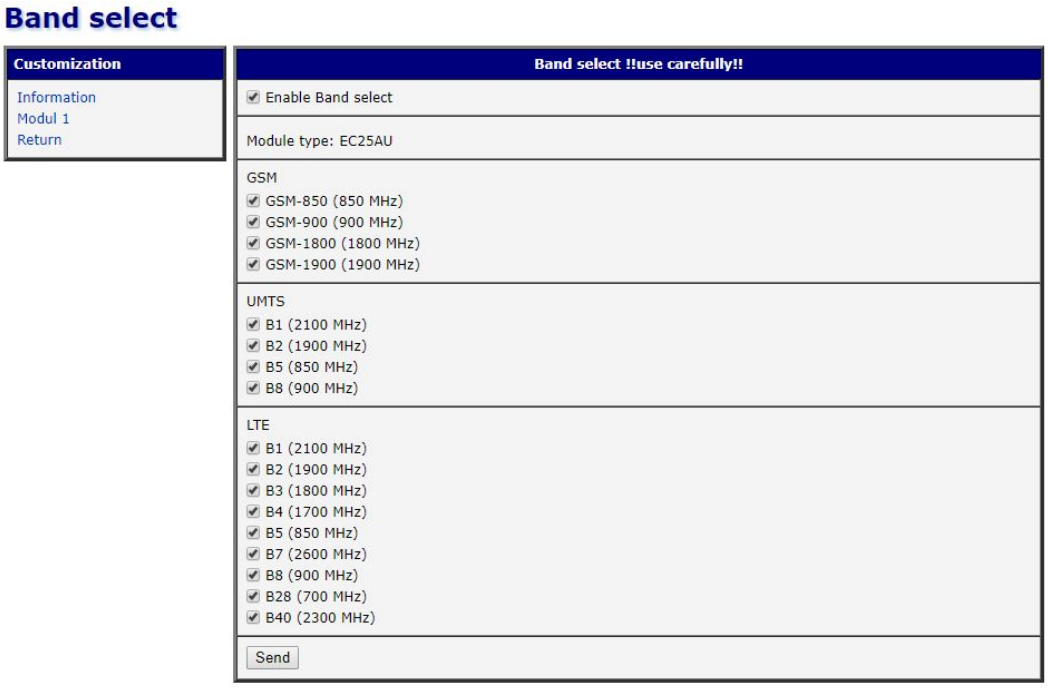

Figure 3: Configuration form – module EC25AU

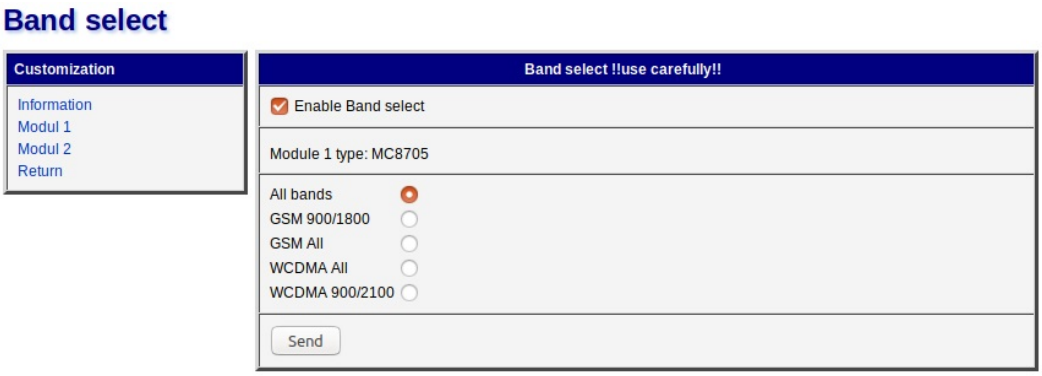

Figure 4: Configuration form – module MC8705

2. Recommended literature

[1] Conel: **Configuration manual for v2 routers**
[1] Conel: **Configuration manual for v3 routers**