FMB202 GSM Operators settings

GSM settings

Operator lists

FMB202 can work in different modes (use different settings) according to the operator list defined. Operator list is used for Data Acquisition mode switching (see [Data acquisition settings](#) section for more details). Modes are changed based on the GSM operator FMB202 is connected to.

Configuring device roaming and blacklist operators is recommended to optimize device performance by mitigating additional latency.

If the roaming operator list is left empty, FMB202 will automatically detect the home operator. If the home operator is written to the roaming operator list, it will still be detected as a home operator. Any operator not in the roaming operator list (except the home operator) will be recognized as an unknown operator and FMB202 will work in Unknown mode (make sure it is configured to allow data sending – GPRS context is enabled).
If the user wants FMB202 to not connect and work with a particular operator it has to be written to *Operator Blacklist*. Up to 50 operators may be entered into this list.

The Operator search procedure is initiated every 15 minutes. During the search, FMB202 tries to connect to the operator providing the strongest signal. It will prioritize operators that are specified in the operator list. If no operators from the operator list are available, the device will try to connect to an operator from the blacklist. If the device connects to an operator from the blacklist, the best operator search procedure is initiated instantly. During the time when the device is connected to a

blacklisted operator, no GPRS connection would be initiated and no data would be sent via GPRS. However, the ability to send SMS commands to the device would remain. If no suitable operator is found on both lists, the device will try to connect to a remaining available operator with the strongest signal.

 In *SIM2 Roaming/Home Operator* list home operator must be added to the any part of the list that functionality works correctly.

FMB202 Dual-SIM functionality can be achieved with one micro card and one soldered SIM chip. GPRS settings and Roaming Operators can be configured separately for SIM1 and SIM2. In *SIM2 Roaming/Home Operator* list home operator must be added to any part of the list to enable correct functionality. Dual SIM operator search functionality works the following way:

- SIM1 and SIM2 home operators have the highest priority;
- When device is connected to home operator, manual roaming operator search is disabled;
- When device is disconnected from home operator, operator search procedure is initiated as normal every 15 minutes;
- *SIM1 Roaming Operators* list has higher priority then *SIM2 Roaming Operator* list.
- When the device finds a new operator from SIM1/SIM2 lists – it switches to new SIM according to the list and connects to the new operator.