

FMM13A GSM Operators settings


FMM13A 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 GSM operator FMM13A is connected to.

The screenshot displays the FMM13A GSM Operators settings interface. The top navigation bar includes buttons for 'Load from device', 'Save to device', 'Update firmware', 'Reset configuration', 'Load from file', 'Save to file', 'Read records', and 'Reboot device'. The left sidebar contains a menu with options like Status, Security, System, GPRS, Data Acquisition, SMS \ Call Settings, GSM Operators (selected), Features, Accelerometer Features, Auto Geofence, Manual Geofence, Trip \ Odometer, Bluetooth, Bluetooth 4.0, 1-Wire, I/O, OBD II, and CAN Adapter. The main content area is titled 'GSM Settings' and contains two lists: 'Roaming Operator List' and 'Operator Black List'. Each list has 20 rows, each with a number and a dropdown menu. Below each list are 'Import CSV' and 'Export CSV' buttons. The top right of the interface shows device information: IMEI 352000000000000, FW 01.00.00 Rev:00, and Configuration 1.00.0.0.

If roaming operator list is left empty, FMM13A will automatically detect home operator. If home operator is written to the roaming operator list, it will still be detected as home operator. Any operator not in the roaming operator list (except the home operator) will be recognized as unknown operator and FMM13A will work in Unknown mode (make sure it is configured to allow data sending – GPRS context is enabled).

If user wants FMM13A to not connect and work with a particular operator it has to be written to *Operator Blacklist*. Up to 50 operators may be entered to this list.

Operator search procedure is initiated as normal every 15 minutes and tries to connect to an operator providing the strongest signal. It will prioritize operators which 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 device connects to an operator from the blacklist, best operator search procedure is initiated instantly. During the time when device is connected to 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.



FMM13A has two SIM card slots. 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.

