# TRB255 Mobile

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The information in this page is updated in accordance with firmware version **TRB2 R 00.07.07.1**.

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# **Summary**

The **Mobile** page is used to configure mobile connection settings.

This manual page provides an overview of the Mobile page in TRB255 devices.

If you're having trouble finding this page or some of the parameters described here on your device's WebUI, you should **turn on "Advanced WebUI" mode**. You can do that by clicking the "Advanced" button, located at the top of the WebUI.



# General

The **General** section is used to configure SIM card parameters that define how the device will establish a mobile connection.

## SIM card settings

The **SIM Card Settings** section is used to configure main SIM card parameters. Refer to the figure and table below for information on the fields contained in that section.



Field	Value	Description
Default SIM	off   on; default: <b>on</b>	Sets this SIM slot as the default one.
Deny data roaming	off   on; default: <b>off</b>	Denies data connection on roaming conditions.
Network type	4G/2G auto   4G only   2G only; default: <b>4G/2G auto</b>	Network connection type preference.
Network Category	M1+NB auto   M1 only   NB only; default: <b>M1+NB auto</b>	Selects LTE category preference. <b>Note:</b> this field only becomes visible when Network type is set to $4G/2G$ auto   $4G$ only.
PIN	integer [000099999999]; default: <b>none</b>	SIM card's PIN (Personal Identification Number) is a secret numeric password used to authenticate the device to the SIM card. PIN codes are comprised of numbers only and the length can range from 4 to 8 symbols. PIN number is saved in <b>flash</b> memory therefore it does not reset when default settings are restored.
Band selection	Auto   Manual; default: <b>Auto</b>	Network frequency band selection method. When set to <i>Auto</i> , the device connects to the band with the best connectivity conditions, while <i>Manual</i> provides the possibility to manually select the bands which the device will obliged to use. Selecting bands manually shows their duplex modes for 4G and 5G capable devices only.

### Low signal reconnect

The **Low signal reconnect** section is used to configure modem operator connection resetting based on signal strength for specified SIM card.



Field	Value	Description
Enable	off   on; default: <b>off</b>	Enables Low signal reconnect.
Reset threshold	integer [-12050]; default: <b>none</b>	Signal threshold in dB for the connection. When signal is under this value modem resets connection.
Reset timeout	integer [1565535]; default: <b>600</b>	Time for the device to wait in seconds before trying to reset the connection again.

### **Operator settings**

The **Operator Settings** section is used to configure which operators can be allowed (Whitelist) or blocked (Blacklist). This function has been removed on from TRB255 since  $TRB2_R_00.07.05$  release.

### **SMS limit settings**

The **SMS Limit Settings** section provides you with the possibility to set up a maximum sent SMS message cap for your SIM card.



Field	Value	Description
Enable SMS Limit	off   on; default: <b>off</b>	Turns SMS limiting on or off.
SMS limit count	integer; default: <b>none</b>	Sets the SMS sending cap, i.e., how many SMS messages can be sent from this SIM card during the specified period.
Period	Day   Week   Month; default: <b>Day</b>	Period for which SMS limiting should apply. After the period expires, the SMS limit counter will be reset.
Start hour/day	0-23 / Monday - Sunday / 0-31; default: ${\bf 0}$	Starting hour of the day / day of the week / day of the month for SMS limiting period.
SMS sent / SMS limit	-	Displays number of sent SMS and set limit
Clear SMS Limit	- (interactive button)	Clears the SMS limit counter for the selected period.

#### PIN/PUK lock notification

If you set an invalid PIN/PUK code or insert a locked/blocked sim card, a side message will pop up with information that the sim card is locked or blocked. Click 'Unlock Sim here` to open the modal window where you can enter the sim card PIN/PUK codes.

Side message where the sim is locked lacksquare

Side message where the sim is blocked



Field	Value	Description
PIN	4-8 positive numeric chars (positive number); default: <b>none</b>	SIM card's PIN (Personal Identification Number) is a secret numeric password shared between a user and a system that can be used to authenticate the user. PIN is saved in flash memory, it will be saved after device reset.
PUK	8 positive numeric chars (positive number); default: <b>none</b>	SIM PUK (Personal Unblocking Key) is a code consisting of 8 digits. It is used to unblock your SIM card when you entered 3 times a wrong PIN code

# **SIM Switch**

The **SIM Switch** section provides you with the possibility to configure SIM switching rules, i.e., set up circumstances under which the device will perform a switch from using one SIM card to another. Refer to the figure and table below for information.



Field	Value	Description
Enable automatic switching	off   on; default: off	Turns automatic SIM switching on or off.
Check interval	integer [33600]; default: <b>30</b>	The frequency (in seconds) at which the device will check for SIM switch conditions. If such a condition exists, the router will perform a SIM switch, if not - it will check for the same conditions again after the amount of time specified in this field passes.
Attempts before SIM switch	integer [110]; default: <b>3</b>	How many times a condition will be checked before executing a SIM switch. For example, if the device is a state that meets at least one SIM switch condition, the device will perform a number of additional checks specified in this field and will perform a SIM switch only if the condition is met on every check.
On weak signal*	off   on; default: <b>off</b>	Performs a SIM switch when the signal strength drops below a certain threshold.
*Signal strength (dBm)	integer [-12050]; default: <b>-90</b>	Lowest signal's strength value (RSSI) in dBm below which a SIM card switch should occur. More information: RSSI
On data limit	off   on; default: off	Performs a SIM switch when the mobile data limit for this SIM card is reached. You can set up a mobile data limit in the Network $\rightarrow$ WAN (Basic WebUI mode) or Network $\rightarrow$ Interfaces (Advanced WebUI mode) pages by clicking 'Edit' next to the interface you wish limit the data for.
On SMS limit	off   on; default: off	Performs a SIM switch when the SMS limit for this SIM card is reached. You can set up SMS limit in the Network $\rightarrow$ Mobile $\rightarrow$ General page.
On roaming	off   on; default: <b>off</b>	Performs a SIM switch when roaming conditions are detected.
No network	off   on; default: <b>off</b>	Performs a SIM switch when a network connection is not available.
On network denied	off   on; default: <b>off</b>	Performs a SIM switch when access to a network is denied by an operator.
On data connection fail	off   on; default: <b>off</b>	Performs a SIM switch when mobile data connection fails.  Possible failure determination methods are:  • LCP echo  • ICMP echo  If no echo is received, the data connection is considered to be down.

When configuring SIM switching from the Secondary card, an additional field called "Switch back to primary SIM card after timeout" becomes available:



Field	Value	Description
Switch back to primary SIM card after timeout		Attempts to switch back to the primary SIM card once the specified period of time passed.
Initial timeout (min)	integer; default: 1	Indicates a time value (in minutes) after which the device will attempt to switch back to the primary SIM card.

### **APN Database**

APN stands for Access Point Name and allows a device's network to connect to the internet. With the APN settings in place, your device builds a connection to a carrier's gateway. APN Database page section provides you with possibility to create/edit/delete APN records. **Note:** APN Database is additional software that can be installed from the **System** → **Package Manager** page.



### Adding new APN

In order to create new APN to database, insert required information and click Add button.





Field	Value	Description
Carrier name	default: <b>empty</b>	Carrier name - name of a company that sells wireless connectivity to customers for cellphone data and telephone calls. It may also be called a mobile network operator, a mobile carrier, cellular company or wireless service provider.
Mobile Country Code	default: <b>empty</b>	Mobile Country Code (MCC) - a mobile code consisting of three digits used to identify GSM networks. MCC is also used along with the International Mobile Subscriber Identity (IMSI) to identify the region from which mobile subscriber belongs.
Mobile Network Code	default: <b>empty</b>	Mobile Network Code (MNC) - a unique two- or three-digit number used to identify a home Public Land Mobile Network (PLMN) to. MNC is allocated by the national regulator.
APN	default: <b>empty</b>	APN (Access Point Name) is configurable network identifier used by a mobile device when connecting to a carrier
PDP type	IPv4/IPv6   IPv4   IPv6; default: <b>IPv4/IPv6</b>	Specifies what type of address is requested from the operator
Authentication type	none   PAP   CHAP; default: none	Authentication method that your GSM carrier uses to authenticate new connections on it's network
Username	default: <b>empty</b>	Your username that you would use to connect to your GSM carrier's network
Password	default: <b>empty</b>	Your password that you would use to connect to your GSM carrier's network

# **SIM Idle Protection**

Some operators block user SIM cards after a period of inactivity. The **SIM Idle Protection** tab provides you with the possibility to configure the router to periodically switch to the secondary SIM card and establish a data connection with a mobile network operator in order to break the idleness

and prevent the SIM card from being blocked.

**Note:** SIM Idle Protection is additional software that can be installed from the **System**  $\rightarrow$  **Package Manager** page.



Field	Value	Description
Enable	off   on; default: <b>off</b>	Turns SIM Idle Protection on or off.
Period	Month   Week; default: <b>Month</b>	How often SIM Idle Protection will be performed. Use the two following fields ('Day' and 'Time') to set the exact time of the action.
Day	integer [130]; default: <b>1</b>	TThe day of the month on which SIM SIM Idle Protection will be performed.
Time	hh:mm; default: <b>01:00</b>	The time when SIM Idle Protection will be performed.
IP type	IPv4   IPv6; default: <b>IPv4</b>	IP type to be used for ping.
Host to ping	ip; default: <b>8.8.8.8</b>	IP address of a host that will be pinged during the SIM Idle Protection action.
Ping package size	integer [11000]; default: <b>56</b>	ICMP packet size in bytes.
Ping requests	integer [130]; default: <b>2</b>	How many ping requests will be sent.