

LTE band lock

Frequency band lock

Frequency bands can be locked with the **AT+QCFG="band"** command. The syntax for the command looks like this:

```
gsmctl -A 'AT+QCFG="band"[,<bandval>,<ltebandval>,<tdsbandval>[,<effect>]]'
```

Where:Fuk

- **<bandval>** - a hexadecimal value that specifies the GSM and WCDMA frequency band. Possible values are:

00000000	No change
00000001	GSM900
00000002	GSM1800
00000004	GSM850
00000008	GSM1900
00000010	WCDMA 2100
00000020	WCDMA 1900
00000040	WCDMA 850
00000080	WCDMA 900
00000100	WCDMA 800
00000200	WCDMA 1700
0000FFFF	Any frequency band

- **<ltebandval>** - A hexadecimal value that specifies the LTE frequency band. Possible values are:

0	No change	
0x1	(CM_BAND_PREF_LTE_EUTRAN_BAND1)	LTE BC1 (2100MHz)
0x4	(CM_BAND_PREF_LTE_EUTRAN_BAND3)	LTE BC3 (1800MHz)
0x10	(CM_BAND_PREF_LTE_EUTRAN_BAND5)	LTE BC5 (850MHz)
0x40	(CM_BAND_PREF_LTE_EUTRAN_BAND7)	LTE BC7 (2600MHz)
0x80	(CM_BAND_PREF_LTE_EUTRAN_BAND8)	LTE BC8 (900MHz)
0x800000	(CM_BAND_PREF_LTE_EUTRAN_BAND20)	LTE BC20 (800MHz)
0x40000000	No change	
0x1a0000800d5	(CM_BAND_PREF_ANY)	Any frequency band

- **<tdsbandval>** - a hexadecimal value that specifies the TDS-CDMA frequency band. Possible values are:

0	No change	
0x1	(CM_BAND_PREF_TDS_BANDA)	TDS BCA
0x2	(CM_BAND_PREF_TDS_BANDB)	TDS BCB
0x4	(CM_BAND_PREF_TDS_BANDC)	TDS BCC
0x8	(CM_BAND_PREF_TDS_BANDD)	TDS BCD
0x10	(CM_BAND_PREF_TDS_BANDE)	TDS BCE

0x20	(CM_BAND_PREF_TDS_BANDF)	TDS BCF
0x40000000	No change	

- **<effect>** - specifies when to take effect. Possible values are:

0	Take effect after reboot
1	Take effect immediately

Examples

```
gsmctl -A 'AT+QCFG="band",0,40,0,1'
```

3. Start mobile data connection:

```
ifup ppp
```

Additionally:

To read used frequencies:

```
gsmctl -A 'AT+QCFG="band" '
+QCFG: "band",0xd3,0x40,0x0
```

To read used frequencies in words format:

```
gsmctl -A AT+QNWINFO
```

to set exact bands:

```
gsmctl -A 'AT+QCFG="band",0,40,0,1'
OK
```

Multiple frequencies at one time:

It's not force one band, when you use AT+QCFG="band" and set any combinations of band you need to use, for <ltebandval> 1800 is band 3, and it's config is 4, and 2600 is band 7, it's config is 40, so you sum this two and it will be 44, so you need to set <ltebandval> as 44.