



B52 Software Manual

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Revision History

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1 About This Document

1.1 Purpose

This document describes the AT commands used in dialing and sample procedure of different case.

2 AT Sequency in Dialer

2.1 Check network registration status

Before setuping data link, network registration status should be checked. Only in home network or roaming state can MIFI start dialing and setup data link.

Cause MIFI focus on PS mainly, only AT+CGREG? (for PS in 2/3G) or AT+CEREG? (for PS in 4G) is needed.

AT+CGREG?

+CGREG: <n>,<stat>[,<lac>],[<ci>],[<AcT>]

<stat>: integer type; indicates the GPRS registration status

- 0 not registered, MT is not currently searching an operator to register to
- 1 registered, home network
- 2 not registered, but MT is currently trying to attach or searching an operator to register to
- 3 registration denied
- 4 unknown (e.g. out of GERAN/UTRAN coverage)
- 5 registered, roaming

AT+CEREG?

+CEREG: <n>,<stat>[,<tac>],[<ci>],[<AcT>]

<stat>: integer type; indicates the EPS registration status

- 0 not registered, MT is not currently searching an operator to register to
- 1 registered, home network
- 2 not registered, but MT is currently trying to attach or searching an operator to register to
- 3 registration denied
- 4 unknown (e.g. out of E-UTRAN coverage)
- 5 registered, roamin

2.2 Setup data link

2.2.1 Define PDP context.

This is for primary PDP

```
AT+CGDCONT=[<cid>[,<PDP_type>[,<APN>[,<PDP_addr>[,<d_comp>[,<h_comp>[,
<IPv4AddrAlloc>[,<emergency indication>[,<P-
CSCF_discovery>[,<IM_CN_Signalling_Flag_Ind>]]]]]]]]]]]
```

Sample: AT+CGDCONT=5,"IP","cmnet"

2.2.2 Define secondary PDP context

This is for secondary PDP

```
AT+CGDSCONT=[<cid>,<p_cid>[,<d_comp>[,<h_comp>[,<IM_CN_Signalling_Flag
_Ind>]]]]]
```

Sample: AT+CGDSCONT=6,5

2.2.3 Define EPS quality of service

This is for 4G PS.

```
AT+CGEQOS=[<cid>[,<QCI>[,<DL_GBR>,<UL_GBR>[,<DL_MBR>,<UL_MBR>]]]]]
```

Sample: AT+CGEQOS= 5, 1, 64,64,64,64

2.2.4 Traffic flow template

This is for secondary PDP

```
AT+CGTFT=[<cid>[,<packet filter identifier>,<evaluation precedence
index>[,<remote address and subnet mask>[,<protocol number (ipv4) / next header
(ipv6)>[,<local port range>[,<remote port range>[,<ipsec security parameter index
(spi)>[,<type of service (tos) (ipv4) and mask / traffic class (ipv6) and mask>[,<flow
label (ipv6)>[,<direction>]]]]]]]]]]]
```

2.2.5 Enter data state

AT+CGDATA=<L2P>[,<cid>[,<cid>[,...]]]

Sample: AT+CGDATA="" ,5

Return: CONNECT

2.3 Check current PDP context

AT+CGDCONT?

+CGDCONT: <cid>,<PDP_type>,<APN>,<PDP_addr>,<d_comp>,<h_comp>[,<IPv4
AddrAlloc>[,<emergency indication>[,<P-CSCF_discovery> [,
<IM_CN_Signalling_Flag_Ind>]]]]]

MIFI will allocate IP to TCP/IP protocol stack after this AT and then user can access internet.

2.4 Sample procedure

2.4.1 Primary PDP for 2/3G

AT+CGREG?

AT+CGDCONT=5,"IP","cmnet"

AT+CGDATA="" ,5

AT+CGDCONT?

2.4.2 Default primary PDP in 4G

AT+CEREG?

AT+CGDCONT?

2.4.3 Dedicated Primary PDP in 4G

AT+CEREG?

AT+CGDCONT=5,"IP","cmnet"

AT+CGEQOS= 5,0,64,64,64,64

AT+CGDATA="" ,5

AT+CGDCONT?

2.4.4 Default secondary or dedicated secondary PDP in 4G

AT+CEREG?

AT+CGDSCONT=6,5

AT+CGEQOS= 5,0,64,64,64,64

AT+CGTFT=

AT+CGDATA="" ,6

AT+CGDCONT?