CINTERION
WIRELESS MODULES

EGS5

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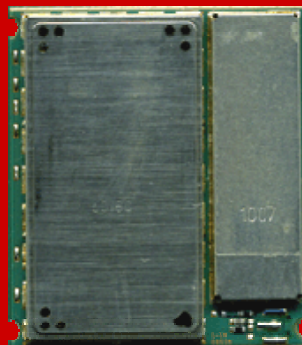
Release Notes

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Contents

1 Preamble

This Release Note describes the Cinterion wireless module
EGS5 01.000.

The document provides a list of changes made since release EGS5 00.850 and a brief description of known issues.

1.1 Related Documents

[1]   EGS5 AT Command Set, 01.000
[2]   EGS5 Hardware Interface Description, v01.000c
[3]   Multiplexer User's Guide, v12
[4]   Multiplexer Driver Developer's Guide, v12
[5]   Multiplexer Driver Installation Guide, v11
[6]   Remote SAT User's Guide, v03
[7]   Application Note 02: Audio Interface Design for GSM Applications, v07
[8]   Application Note 07: Rechargeable Lithium Batteries in GSM Applications, v05
[9]   Application Note 16: Updating Firmware, v09
[10] Application Note 17: Over-the-Air Firmware Update, v03
[11] Application Note 22: Using TTY / CTM Equipment, v02
[12] Application Note 24: Application Developer's Guide, v07
[13] Application Note 26: Power Supply Design for GSM Applications, v04
[14] Application Note 32: Integrating USB into Applications, v04
[15] Application Note 45: Jamming Detection – Radio Link Stability Monitor, v02
[16] Application Note 46: Incremental Java Application Update, v02
[17] Application Note 48: SMT Module Integration, v06
[18] Java User's Guide for Cinterion Wireless Modules, v016
[19] Java doc \wtk\doc\html\index.html

To visit the Cinterion Wireless Modules website you can use the following link:
http://www.cinterion.com

2 Important Notes

Feature	Brief description
Updating Java platform	Please take care to use the latest Java SDK / WTK supplied with your EGS5 module. If you have jar and jad files created with previous SDKs / WTKs please compile new jar and jad files. This is particularly important for EGS5 01.000 because the Cinterion Java packages have been renamed from com.siemens.icm.* to com.cinterion.*

3 Improved Features

Feature	Brief description
Power saving	The current consumption during CYCLIC SLEEP mode (AT+CFUN=7 or 9) is now fully in line with the values specified in [2].
AT^SMOND	The AT^SMOND command has been improved to show correct neighbour cell IDs.
AT^SCTM	The automatic thermal shutdown capability has been improved: If the board temperature threshold is exceeded during the first 120s after reboot, the module sends the URC "^SCTM_B: {-2/2}" and switches off as specified in [2].
Java System.out	Starting or terminating Java no longer resets the USB interface. This eliminates the need to close the USB COM port before starting or terminating Java.

4 Known Issues

AT command / feature	Brief description
Fax	Proper functioning of fax transmission cannot be guaranteed under all circumstances.
Remote SAT ER mode	If Explicit Response (ER) mode is activated (AT^SSTA=1) take care that any pending Proactive Command session is completed and notified with URC "^SSTN: 254" before using ATD.

AT command / feature	Brief description
Remote SAT, <statAddInfo>	The <statAddInfo> for the AT^SSTR command does not work on SAT Setup Call (AT^SSTR=16,<status>,,,<statAddInfo>).
AT^SRTC	If a voice call comes in while SAT tone is playing, the module starts playing the ringing tone when the SAT tone is finished even though the ringing tone is muted.
AT^SALS, AT+CCWA	If the presentation of "^SALS" URCs for dual line SIM cards and Call Waiting are activated, the "^SALS" URC does not show up for a waiting call. In this case, only the "+CCWA" URC will be displayed.
AT^SIND, "+CIEV: band" indicator, AT^SCFG, "Radio"Band" feature	The "Radio"Band" parameter <rbc> of the AT^SCFG command and the "+CIEV: band" indicator of the AT^SIND command are specified to output the same value. However, if <rbc> equals the maximum value 15 (quadband) the "band" URC and the AT^SIND read command show a lower value.
AT+CALA, AT+IPR=0	Wakeup into Airplane mode (AT+CALA alarm followed by module switch-off) cannot be used if autobauding (AT+IPR=0) is enabled. Before setting the function Wakeup into Airplane mode ensure that the module is configured for a fixed bit rate (AT+IPR≠0). Reminder messages (AT+CALA alarm set without switching off the module) are not concerned and will work properly.
ATZ / AT+CSCB	ATZ resets all user defined cell broadcast message indication settings specified with AT+CSCB to their factory defaults.
AT^SPBS	If the maximum number of 255 phonebook entries are stored on a SIM card, the browse command AT^SPBS sometimes does not step through all of these phonebook entries.
Removing the SIM during operation	Please avoid removing the SIM quickly after SIM PIN authentication, i.e. at a time when the ME is initially loading data from the SIM. In particular, if the SIM is removed when AT commands that require SIM access (such as phonebook, SMS or Remote SAT commands) are already being processed during SIM initialization it is strongly recommended to reset the module. The best approach is not to remove the SIM before the URCs "^SSIM Ready" and/or the "+CIEV: simstatus" notify that the initial process of reading SIM data after SIM PIN authentication has completed.

AT command / feature	Brief description
Java: Send buffer size	It is not recommended to change the size of internal socket buffer (send buffer) by means of the socket function setsockopt() with the option SNDBUF. The internal socket buffer is set to optimal size by default, any change of this value can cause a loss of data.
GPRS PPP connection setup	In rare cases, when using other systems than MS Windows the GPRS connection setup may fail due to not having received the GPRS network response to the Activate PDP context Request in time, i.e. within the first three IPCP-Configure-Requests sent by the PPP client. In this case, the module transmits an IPCP-Configure-Reject by default. The problem can be circumvented by extending the retransmission timeout between IPCP-Configure-Requests or to request additional IPCP parameters to avoid DNS address reject.
HTTP Post	To post large amounts of data with HTTP be sure that URC Mode for Internet Service AT commands is enabled (AT^SCFG= "Tcp/WithURCs",on). As specified in [1] data shall be transferred in data packets of max. 1500 bytes. During transfer, always wait for the "^SISW: x,1" URC before sending the next data packet. Please note that Polling Mode is currently not usable for posting large data with HTTP.
"+CREG" URCs	If SIM PIN protection is disabled and AT+COPS is configured for automatic operator selection it is possible that the URCs "+CREG: <stat>" or "+CREG: <stat>[, <lac>, <ci>]" do not show up after restarting the module. This happens for example when the module registers to the network before the "^SYSSTART" URC is issued. To verify the network registration, please use the AT+CREG? read command.
IGT timing if charger is connected to VCHARGE	If a charger is connected to the VCHARGE pin, we recommend that IGT be asserted for at least 1000 ms to enable the module to properly start into Normal mode. Otherwise, if IGT is held low for less than 1000ms, the module might only start into Charge-only mode.
Shutdown on IGT	The feature AT^SCFG="MEShutdown/OnIgnition" can only be enabled if USB is not connected.
Airplane Mode	In very rare cases it is possible that the module unintentionally starts into Airplane Mode instead of Normal Mode. The mode is either indicated by the "^SYSSTART AIRPLANE MODE" URC or must be requested, if startup URCs, such as "^SYSSTART" or "SYSSTART AIRPLANE MODE", are not output because of Autobauding (AT+IPR=0).

AT command / feature	Brief description

	It is therefore recommended to detect the Airplane Mode configuration each time when initializing the module and to switch it off if the response is "on".
	 1. Requesting the current state:
	     AT^SCFG="MEopMode/Airplane"
	     ^SCFG: "MEopMode/Airplane",*"on"*
	     OK
	 2. Switching off Airplane Mode
	     AT^SCFG="MEopMode/Airplane/OnStart","off"
	     ^SCFG: "MEopMode/Airplane/OnStart","off"
	     OK
	     AT^SCFG="MEopMode/Airplane","off"
	     ^SCFG: "MEopMode/Airplane","off"
	     OK
	     ^SYSSTART
	 The "^SYSSTART" URC shows that the module instantly goes into Normal Mode.

EGS5 modules with Customer IMEI	This note applies only to EGS5 modules with Customer IMEI mode:
	 After the IMEI was written the module will go into Airplane mode when restarted. Therefore, after restarting the module, use the AT^SCFG command and deactivate the parameter "MEopMode/Airplane/OnStart":
	     AT^SCFG="MEopMode/Airplane/OnStart","off"
	     ^SCFG: "MEopMode/Airplane/OnStart","off"
	     OK
	
	 AT commands and further details on how to write the Customer IMEI can be found in "Application Note 21 - Implementing Customer IMEI". This document is supplied only with EGS5 modules preconfigured for Customer IMEI mode.

USB hot plugging	EGS5 supports USB hot plugging. However, the internal power manager is not notified of this action. This prevents the module from entering sleep mode. In other words: The module will no longer enter sleep mode once USB has been unplugged.
AD converter / AT^SRADC	Please use only one of the two AD converter channels at a time. In rare cases it may happen that the values of the two channels are interfering each other if both channels are opened at the same time.