

INTEGRITI GSM COMMUNICATIONS TASK



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http://www.innerrange.com







PO Box 9292, Scoresby, Victoria 3179, Australia
Telephone: +61 3 9780 4300 Facsimile: +61 3 9753 3499
Email: enquiries@innerrange.com Web: www.innerrange.com



Integriti GSM Communications Task

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The GSM Communications Task can interface with one of the many Inner Range FE3000 or Inner Range Multipath STU products. For the purpose of this document the device that the GSM Communications Task communicates with will be referred to as the FE3000.

Description of the Integriti GSM Communications Task:

The Integriti Controller's GSM Communications Task is used to communicate reportable events to a Central Monitoring Station, to send reportable events via SMS message and/or to receive SMS control messages.

Normal Alarm Reporting:

When the "Enable Alarms" option of the GSM Communications Task is set, the GSM Communications Task waits for an event to transfer to the FE3000. When an event is detected the GSM Communications Task sends the event to the FE3000 to be reported to the Central Monitoring Station. The FE3000 will attempt to report the event via one of its many communication paths. The FE3000 reports back to the GSM Communications Task whether or not it was successful with its attempt to communicate the event(s). If the FE3000 could not successfully communicate the event(s) to the Central Monitoring Station then the GSM Communications Task can pass the event(s) to its programmed Backup Communications Task.

SMS Alarm Reporting:

When the "Enable SMS" option of the GSM Communications Task is set, the GSM Communications Task waits for an event to transfer to the FE3000 as an SMS. When an event is detected the GSM Communications Task sends the event to the FE3000 to be sent as an SMS to the Telephone Number, or Telephone Number List, that is defined in "SMS number 1" (if "SMS number 1" is not qualified then the GSM Communications Task will attempt to use "SMS number 2"). The FE3000 will attempt to send the SMS message(s) and will reports back to the GSM Communications Task whether or not it was successful. If the FE3000 could not successfully send the SMS message(s) no further action is taken by the GSM Communications Task. When there is an SMS message pending to be sent, if the FE3000 takes longer than 30 seconds to be free to accept the next SMS message then the pending SMS message will be discarded.

SMS Control:

The GSM Communications Task can be used to turn Areas on/off, turn Auxiliaries on/off and to trigger Named Actions via SMS control commands. Inputs can also be Isolated or de-Isolated. The GSM Communications Task can be configured to authenticate an SMS command either via a Telephone Number or via a User PIN.

If only the Telephone Number is used as the authentication method then there is no restrictions applied to the SMS control command. This means that as long as the command syntax is correct the SMS control action is carried out (E.g. any Area can be turned ON/OFF or any Input can be Isolated/de-Isolated etc.).

If a User PIN is provided as part of the SMS control command then the User's permissions governs the level of control that the SMS control command can execute. If the User does not have access to control the entity type in their Remote Access Permissions of their Menu Group, then they cannot control the entity. Some SMS control commands also have additional checks, for example:

- When controlling an Area ON the User must have the Area in their "Area ON List".
- When controlling an Area OFF the User must have the Area in their "Area OFF List".
- When Isolating or De-Isolating an Input the User must have the Input in their "Area OFF List".
- When triggering a Named Action, if the Named Action has an "Action Group" set then the User must have at least one matching "Action Group" set to that of the Named Action.

When a valid SMS control command has been received and processed, an SMS reply will be sent back to the original SMS phone number. In most cases the SMS reply will be the review associated with the action that was performed, however in some exception circumstances an error reply may be sent or even no reply will be sent. An example of these exception circumstance are things like SMS Alarms are being sent instead of SMS replies (SMS Alarms are a higher priority than SMS replies), the review for the executed action was not detected or the FE3000 was full and unable to accept additional SMS messages. As with SMS Alarms, if there is an SMS reply message pending to be sent and the FE3000 takes longer than 30 seconds to be free, then the pending SMS reply message will be discarded.

Δ	Connectivity		
	▶ RS-232 Serial Interface	Unibus Uart 1 (1)/Baud1200 baud	
Δ	Reporting		
	Client Code (Hex)	00000005	
	Client Code (Dec)	000000005	
	SMS number 1	<u>,</u> My Mobile	×
	SMS number 2		×
	Enable SMS	✓	
	Enable Alarms	✓	
	Xmit Isolated		
4	Options		
	Send IRFast	▽	
	Use C3K Compatible IRFast		
	Update Time		
	Save RSSI		
	Alarm look ahead		
	SMS look ahead		
	General Opening / Closing		
	Need PIN		
	SMS error reply	✓	
	Maximum Messages	0	
Δ	Contact ID		
	Мар	Standard	-
Δ	Advanced		
	▶ Comms Task Groups		
		My Mobile	
	CID Telephone Number		×
	Service Telephone Number	<u>I</u> Service Co	×
	SMS Control Number	■ SMS Control	×
	GSM reg input		×
	GSM signal input		×
	GSM fail input		×
	GSM backup input		×
	GSM online input		×

Figure 1: GSM Communications Task configuration from the Integriti System Designer

Command Syntax	Command Description
[<pin>] ?</pin>	Display SMS Help
[<pin>] A <area id=""/> <n f=""></n></pin>	Control an Area using its ID
[<pin>] A <area name=""/> <n f=""></n></pin>	Control an Area using its Name
[<pin>] A <area id=""/> L</pin>	List 4 Area Names starting at Area ID
[<pin>] A <area name=""/> L</pin>	List 4 Area Names starting at Area Name
[<pin>] A ?</pin>	Display Area Help
[<pin>] I <input address=""/> <i d=""></i></pin>	Isolate an Input using its ID
[<pin>] I <input name=""/> <i d=""></i></pin>	Isolate an Input using its Name
[<pin>] I <input id=""/> <l></l></pin>	List 4 Input Names starting at Input ID
[<pin>] I <input name=""/> <l></l></pin>	List 4 Input Names starting at Input Name
[<pin>] I ?</pin>	Display Isolate Help
[<pin>] P <named action<br="">Address> <n f=""></n></named></pin>	Trigger a Named Action using its ID
[<pin>] P <named action<br="">Name> <n f=""></n></named></pin>	Trigger a Named Action using its Name
[<pin>] P <named action="" id=""> <l></l></named></pin>	List 4 Named Actions starting at Named Action ID
[<pin>] P <named action<br="">Name> <l></l></named></pin>	List 4 Named Actions starting at Named Action Name
[<pin>] P ?</pin>	Display Named Action Help
[<pin>] X <aux address=""> <n f=""></n></aux></pin>	Control an Auxiliary using its ID
[<pin>] X <aux name=""> <n f=""></n></aux></pin>	Control an Auxiliary using its Name
[<pin>] X <aux id=""> <l></l></aux></pin>	List 4 Auxiliary Names starting at Auxiliary ID

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Command Syntax	Command Description
[<pin>] X <aux name=""> <l></l></aux></pin>	List 4 Auxiliary Names starting at Auxiliary Name
[<pin>] X ?</pin>	Display Auxiliary Help
[<pin>] R</pin>	Reset the SMS buffer to the latest review
[<pin>] R ?</pin>	Display Reset SMS Help
	7 H 4 0240

Table 1: SMS control command syntax

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Example	Example Description
01?	01=User PIN, ?=Display the SMS Help message
01A001N	01=User PIN, A=Area Control, 001=Area #001, N=Turn ON
AHouseF	A=Area Control, House=Area Name, N=Turn OFF
A1L	A=Area Control, 1=Area #1, L=List 4 Area Names starting at 1
AHouseL	A=Area Control, 1=Area #1, L=List 4 Area Names starting at House
A?	A=Area Control, ?=Display the Area Help message
01IC01:Z05I	01=User PIN, I=Isolate Control, C01:Z05=Input C01:Z05, I=Isolate
IEntry PIRD	I=Isolate Control, Entry PIR=Input (E.g. C01:Z05), D=DeIsolate
IC01:Z05L	I=Isolate Control, C01:Z05=Input C01:Z05, L=List 4 Input Names starting at C01:Z05
IEntry PIRL	I=Isolate Control, Entry PIR=Input (E.g. C01:Z05), L=List 4 Input Names starting at Entry PIR
I?	I=Isolate Control, ?=Display the Isolate Help message
01P001N	01=User PIN, P=Named Action Control, 001=Named Action #001, N=Trigger ON
PUnlockF	P=Named Action Control, Unlock=Named Action Name, F=Trigger OFF
P1L	P=Named Action Control, 1=Named Action #1, L=List 4 Named Action Names starting at 1
PUnlockL	P=Named Action Control, Unlock=Named Action Name, L=List 4 Named Action Names starting at Unlock
P?	P=Named Action Control, ?=Display the Named Action Help message
01XC01:X07N	01=User PIN, X=Auxiliary Control, C01:X07=Auxiliary C01:X07, N=ON
XStrobeF	X=Auxiliary Control, Strobe=Auxiliary (E.g. C01:X07), F=OFF
XC01:X07L	X=Auxiliary Control, C01:X07=Auxiliary C01:X07, L=List 4 Auxiliary Names starting at C01:X07
XStrobeL	X=Auxiliary Control, Strobe=Auxiliary (E.g. C01:X07), L=List 4 Auxiliary Names starting at Strobe
X ?	X=Auxiliary Control, ?=Display the Auxiliary Help message

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Example	Example Description
01R	01=User PIN, R=Reset SMS command
R?	R=Reset SMS, ?=Display the Reset SMS Help message

Table 2: Example of SMS control commands

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Interface between Integriti and an FE3000:

The connection between the Integriti Controller and the FE3000 is made via a serial interface, by connecting one of the Integriti Controller's UARTs to the FE3000. FE3000s are capable of communicating at 600, 1200 or 2400 BAUD. The recommended port configuration for communications between the Integriti Controller and an FE3000 is 1200,N,8,1 (as per Figure 1: GSM Communications Task configuration from the Integriti System Designer).

Notes for the GSM Communications Task:

- The format (IRfast or ContactID) that the normal event data is communicated to the FE3000 via is determined by the FE3000. If the FE3000 tells the GSM Communications Task to use IRfast, then IRfast is what the GSM Communications Task sends. This may catch customers out as the new Integriti IRfast may not be implemented in the Central Monitoring Station whereas the C3K IRfast may be.
- There is currently no option to disable SMS control commands, i.e. restricting SMS control of an entity is achieved via the User's Menu Group.
- When GSM Communications Task is configured as a Backup Communications Task, under normal "idle" conditions, no events are reported but SMS control messages are still processed.