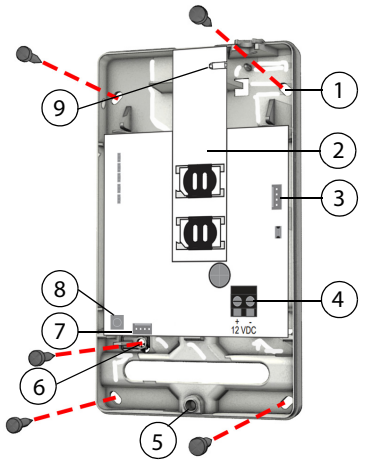# P ▲ R ▲ D O X™

🌀 PCS250G 🔲

GPRS/GSM Communicator Module

Installation and Programming Guide
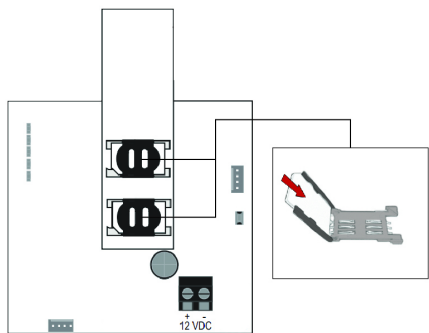
Compatible with Insite GOLD and SWAN Server

Installation

1 Mounting holes
2 GPRS Module with dual SIM card slots
3 InField upgrade connector
4 Power terminal
5 Captive screw
6 Tamper screw knockout hole
7 Serial cable connector
8 Tamper switch
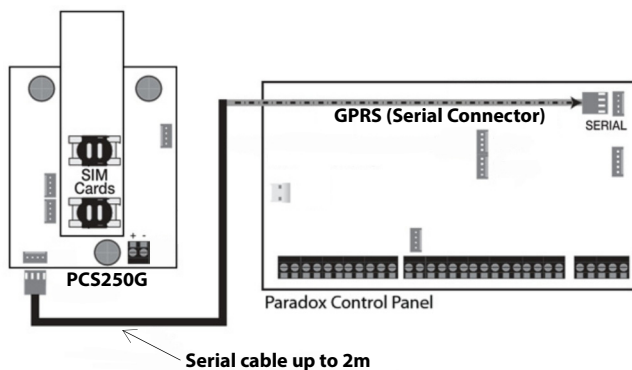9 Optional MMCX male connector (for use antenna)

SIM Card Connection

The PCS250G supports two standard GSM provider SIM cards.
To install the SIM cards, open the SIM Card tray and insert card into slot, as shown. SIM Card 1 is used as "Primary" and SIM Card 2 for "Backup".

Panel Connections

The PCS250G is connected directly from the serial cable connector located on the bottom of the unit to the serial connector of the panel using the provided serial cable.

Serial cable up to 2m

Antenna Extension Connection

Use an antenna extension kit to improve RF reception if your module's signal strength is weak. Antenna kits are purchased separately.

IP150 Connection

The PCS250G can be connected to the IP150 Internet Module's PCS port. For more information on how to configure this option, please refer to the IP150's Installation manual.

UC300 Connection

The PCS250G can be connected to the UC300 Serial port. For more information on how to configure this option, please refer to the UC300's Installation manual.

Powering-up the PCS250G

Once your hardware connections are completed, the PCS250G module will begin its power up sequence.

- **SIM1, SIM2, GPRS, and GSM** LEDs will flash intermittently for several seconds.
- **SIM card 1** LED will slowly flash green while searching for the GSM network; once found the LED will be solid green and signal strength LEDs turn on (depending on network strength).

If configured for GPRS reporting, you will need to configure network provider information. Refer to Programming.

LED Functionality

LED	Functionality
SIM1 and SIM2	Solid green - SIM Card 1/2 is installed on the GPRS module Quick green flashing - SIM card 1/2 is exchanging data Slow green flashing - Searching the network Flash red (once) SIM Card 1/2 is defective Off - SIM Card 1/2 is not installed, not active, or currently not in use
GPRS	Solid green - unit is set for GPRS operation Quick green flashing - exchanging data (when this LED in ON, the GSM LED stays OFF)
GSM	Option not applicable on the PCS250G
Signal Strength	Three LEDs indicate network strength

Programming

In order to configure the PCS250G for reporting, you will need to first configure your SIM cards. Please note that SIM Card 1 can be configured via panel programming and SIM Card 2 via SMS.

GPRS Reporting (Serial Port Connection)

Network Provider Information

MG/SP	EVO	Feature
[921]	[2960]	APN part 1 (characters 1-16)
[922]	[2961]	APN part 2 (characters 17-32)
[923]	[2962]	APN user name part 1 (1-16)
[924]	[2963]	APN user name part 2 (17-32)
[925]	[2964]	APN password part 1 (1-16)
[926]	[2965]	APN password part 2 (17-32)
Important: This information can be obtained from your mobile network provider.		

Network Provider Information via SMS

Command	Description
P[password].APN2.NAME.[Access Point Name]	Used to program the SIM Card 2 Access Point Name
P[password].APN2.USER.[Access Point Name]	Used to program the SIM Card 2 Access Point User
P[password].APN2.PSW.[Access Point Name]	Used to program the SIM Card 2 Access Point Password
P[password].APN2.CLEAR	Used to clear the SIM Card 2 Access Point Name
P[password].VAPN2.[CALL BACK PHONE NUMBER]	Used to view the SIM Card 2 Access Point Name information

GPRS Reporting Options

MG/SP	EVO	Feature	Details
[918] [919]	[2976] to [2983]	Account / Partition Registration	MG/SP: Sections represent account/partition 1 and 2 EVO: Sections represent account / partition 1 to 8
[806]	[2975]	[7] Off + [8] Off = landline only [7] Off + [8] On = GPRS primary / landline backup (default) [7] On + [8] Off = landline only [7] On + [8] On = landline and GPRS in parallel	

Receiver Settings	MG/SP		
Receiver #:	1	2	Backup
IP address*	[929]	[936]	[943]
IP port **	[930]	[937]	[944]
IP address WAN 2	[931]	[938]	[945]
IP port WAN2	[932]	[939]	[946]
Receiver password	[933]	[940]	[947]
Security Profile	[934]	[941]	[948]
Module registration - Press **[ARM]** to register	[935]	[942]	[949]

Receiver Settings	EVO			
Receiver #:	1	2	3	4
IP address*				
IP port **				
IP address WAN 2	[2984]	[2986]	[2988]	[2990]
IP port WAN2				
Receiver password				
Security Profile				
* For 1 or 2 digit numbers, add "0's" before the digit: e.g., 138.002.043.006 ** Default = 10000 Enter [MEM] for blank space				

KEEPING MY FAMILY SAFE

SMS Messages for Backup

Command	Description
P[PASSWORD].SMS[GSM MODEM TELEPHONE #].[IPRS-7 PASSWORD]	Used to program the receiver's SMS parameters

Module Supervision

MG/SP	EVO	MG/SP Details	EVO Details
[805]	[2950]	[5] Off + [6] Off = Module supervision disabled [5] Off + [6] On = Armed: generates a trouble (**default**) [5] On + [6] Off = Armed: generates an audible alarm [5] On + [6] On = Silent alarm becomes an audible alarm	[5] Off + [6] Off = Module supervision disabled [5] Off + [6] On = Armed: generates an audible alarm [5] On + [6] Off = Armed: generates a trouble (**default**) [5] On + [6] On = Silent alarm becomes an audible alarm
[855]	[2952]	Set the delay before a GSM No Service trouble is reported. (000 - 255 x 2 sec. / default: 016 (32 sec.)	

Additional Programming Options

SMS Language

SMS languages can be upgraded locally using the "Firmware" section of the PCS250G on our website. It allows you to download version 4.20 (or higher) in the SMS language of your choice. The below table lists the languages available.

SMS Languages			
English (default)	Estonian	Italian	Russian
Albanian	Finnish	Latvian	Serbian
Belgian	French	Lithuanian	Slovak
Bulgarian	French Canadian	Macedonian	Slovenian
Chinese	German	Malay	Spanish
Croatian	Greek	Polish	Swedish
Czech	Hebrew	Portuguese	Turkish
Dutch	Hungarian	Romanian	

List of SMS Commands

Command	Description
P[password].A[IP address].P[port number]	Used for GPRS remote access
P[password].IP.[call back phone number]	Used to obtain the IP address and IP port of the PCS250G and whether or not the "bandwidth saver" option is being used
P[password].RESET	Used to reset the PCS250G
P[password].BWS.ON	Used to enable bandwidth saver mode
P[password].BWS.OFF	Used to disable bandwidth saver mode
P[password].STATUS.[phone number] *This command is not available with use of the UC300.	Used to obtain the signal strength, signal quality, GPRS connection status, and APN settings of the current SIM card
P[password].APN1.NAME.[Access Point Name]	Used to program the SIM Card 1 APN
P[password].APN1.USER.[Access Point Name]	Used to program the SIM card 1 APN User Name
P[password].APN1.PSW.[Access Point Name]	Used to program the SIM card 1 APN Password
P[password].APN1.CLEAR]	Used to clear the SIM Card 1 APN
P[password].VAPN1.NAME. [Access Point Name]	Used to view the SIM card 1 APN
P[password].APN2.NAME.[Access Point Name]	Used to program the SIM card 2 APN
P[password].APN2.USER.[Access Point Name]	Used to program the SIM card 2 APN User Name
P[password].APN2.PSW.[Access Point Name]	Used to program the SIM card 2 APN Password
P[password].APN2.CLEAR	Used to clear the SIM card 2 APN
P[password].VAPN2.[CALL BACK PHONE NUMBER]	Used to view the SIM card 2 APN information
P[password].[IP1W1/ IP1W2/ IP2W1/ IP2W2/ IP3W1/ IP3W2/ IP4W1/ IP4W2].[domain name]	Set domain name for GPRS receiver
P[password].[IP1W1/ IP1W2/ IP2W1/ IP2W2/ IP3W1/ IP3W2/ IP4W1/ IP4W2].CLEAR	Clear domain name for GPRS receiver
P[password].DNS.[ip address]	Set domain name server (DNS) IP address
P[password].DNS.CLEAR	Clear domain name server (DNS) IP address
P[password].VIP.[phone number]	Get domain name server (DNS) info
C[user code].[ARM/OFF].A[area number], [area number], [area number]TO[area number]	Arm/Disarm area
P[password].---S	Disable SWAN polling (V4.10.011 and up)
P[password].+++S	Enable SWAN polling (V4.10.011 and up)

Technical Specifications

Specifications	Description
RF Power	Class 4 (2W) @ 850/1900 MHz Class 2 (1W) @ 1800/1900 MHz
Antenna Bandwidth	70 / 80 / 140 / 170 MHz
Antenna	Gain <3dBi; impedance 50 ohm Input power >2W peak power
Voltage Input	12 VDC nominal
Consumption (1.2A peak) during GPRS/GSM transmission	100mA standby Average 450 mA
Operating Temperature	0ºC to 50ºC (32ºF to 122ºF)
Encryption	128-bit (MD5 and RC4) or 256-bit (AES)
SMS Protocol	8-bit (IRA:ITU-T.50) or 16-bit (UCS2 ISO/IEC10646)
Humidity	5 - 90% non-condensing
Weight	200 gr (7.05 oz)
Dimensions	17.2 x 9.8 x 4.4 cm 6.8 x 3.9 x 1.7 in.
Certifications	Please visit Paradox.com for the latest certification information

If you have any comments please write to us at Paradox.com/products/feedback.