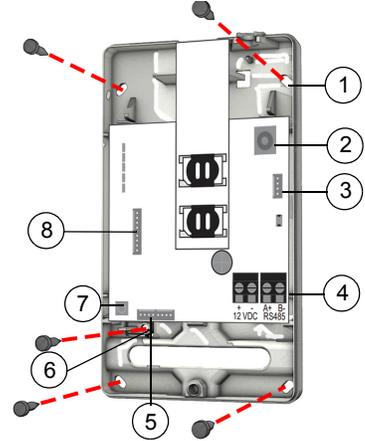


**GPRS/GSM Communicator Module
Installation and Programming Guide**

****Compatible with Insite GOLD
and SWAN Server****



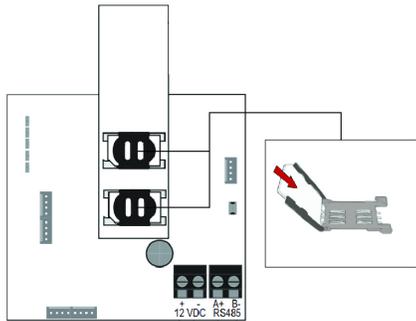
Installation



- 1 Mounting holes
- 2 Audio jack
- 3 InField upgrade connector
- 4 RS485 / power terminal
- 5 Serial connector
- 6 Tamper screw hole
- 7 Tamper switch
- 8 Audio module connector (e.g., VDMP3)

SIM Card Connection

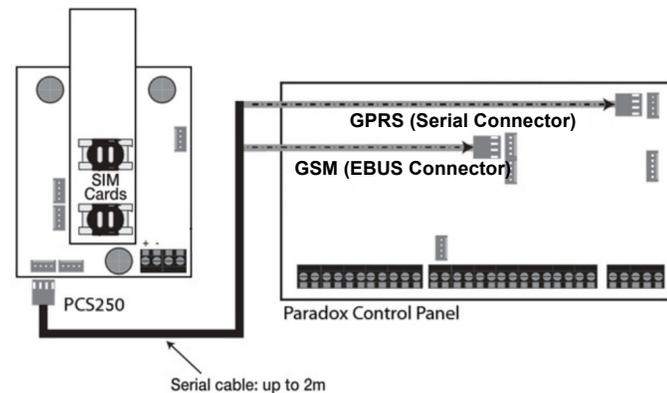
The PCS250 supports two standard GSM provider SIM cards. To install the SIM cards, open the SIM Card tray and insert card into slot, as shown. SIM Card 1 is used as "Primary" and SIM Card 2 for "Backup".



Panel Connections

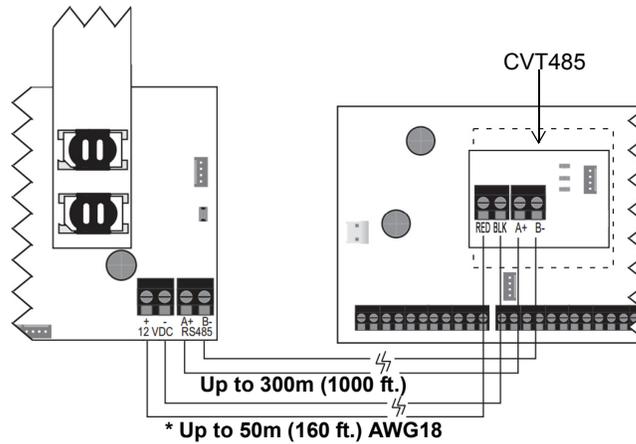
Connect the PCS250's serial out to the serial connector on the panel.

- For GPRS reporting, connect to the Serial port of the panel.
- For GSM reporting, connect to the EBUS port of the panel.



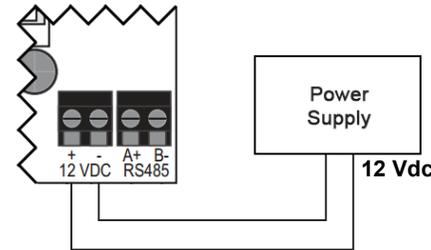
RS485 Connection

A CVT485 module can be connected onto the control panel's EBUS in order to lengthen the distance (up to 300 m. / 1000 ft.) between the panel and the PCS250. Refer to the drawing for connections.



***Optional Power Supply Connections (for RS485)**

The PCS250 is designed to be powered by the control panel up to 50m (160 ft.) with an 18 gauge wire. If you are using a CVT485 module to increase the distance from your panel, an external power supply should be used. Refer to the drawing below.



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

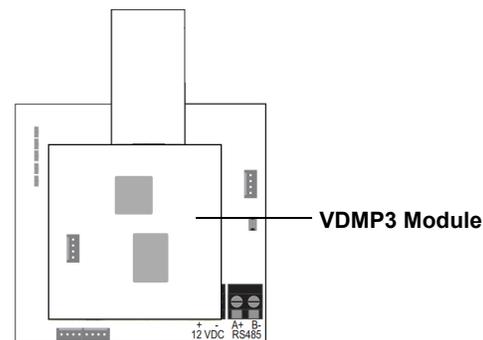
The PCS250 can be connected to the IP150 Internet Module's PCS port. For more information on how to configure this option, please refer to the IP150's Installation manual.

UC300 Connection

The PCS250 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.

VDMP3 Connection (GSM mode only)

If using a VDMP3 module for personal reporting, mount the VDMP3 directly onto the PCS250 Communicator Module to enable the VDMP3 to dial out using the GSM cell phone network.



Powering-up the PCS250

Once your hardware connections are completed, the PCS250 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	Solid green - unit is set for GSM operation Quick green flashing - exchanging data (when this LED in ON, the GPRS LED stays OFF)
Signal Strength	Three LEDs indicate network strength

Programming

In order to configure the PCS250 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				

GSM Reporting (EBUS Connection)

Reporting Options

MG/SP	EVO	Details
[805]	[2950]	[1] Off + [2] Off = landline only (default) [1] Off + [2] On = landline primary / GSM backup (default) [1] On + [2] Off = GSM primary / landline backup [1] On + [2] On = GSM only
[815] to [817]	[3071] to [3074]	Telephone numbers
[811] to [812]	[3061] to [3068]	Account numbers

SMS Messages for Backup

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

Additional Programming Options

SMS Language

SMS languages can be upgraded locally using the "Firmware" section of the PCS250 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 PCS250 and whether or not the "bandwidth saver" option is being used
P[password].RESET	Used to reset the PCS250
P[password].BWS.ON	Used to enable bandwidth saver mode
P[password].BWS.OFF	Used to disable bandwidth saver mode
P[password].VOLOUT.[GSM output volume]	Used to set the GSM output volume; values range between 50 to 100
P[password].STATUS.[phone number]	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

Command	Description
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
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
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.

Warranty

The Limited Warranty Statement can be found on the website www.paradox.com/terms.

Patents

Your use of the Paradox product signifies your acceptance of these terms and conditions. The following US patents may apply 5,886,632 and 6,215,399. Other Canadian and international patents may apply.

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