P A R A D O X™

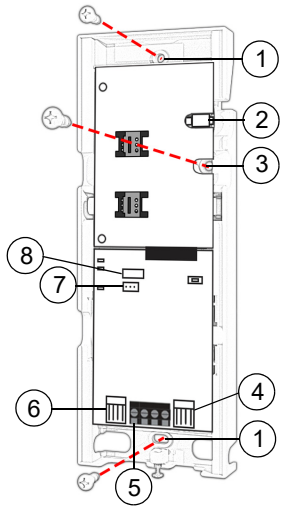
PCS265 LTE

LTE / 4G / 3G / 2G / GSM Communicator Module

Installation and Programming Guide

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

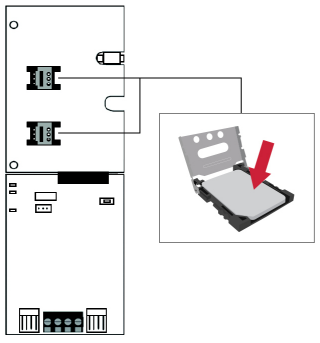
Installation



1 Mounting hole
2 Antenna connector
3 Wall tamper hole
4 Serial connector
5 RS485 / power terminal
6 Upgrade connector
7 Battery terminal
8 Cover tamper switch

SIM Card Connection

The PCS265 LTE supports two nano LTE/4G/3G/2G or GSM provider SIM cards. To install the SIM cards, open the SIM Card tray and insert card into base, as shown. SIM Card 1 is used as “Primary” and SIM Card 2 for “Backup”.

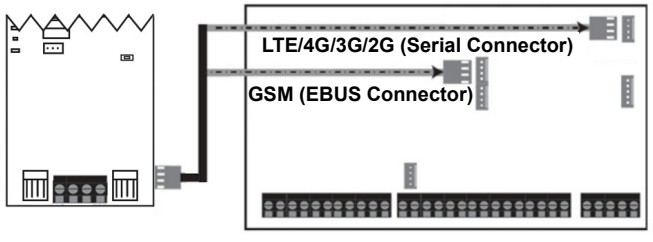


Note: SIM Card 2 can only be configured via SMS.

Panel Connections

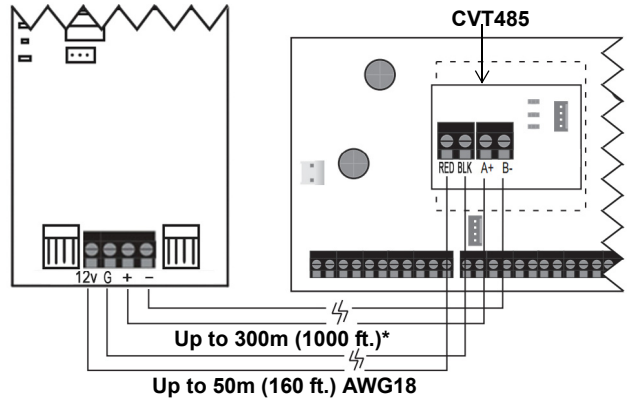
Connect the PCS265 LTE’s serial out to the serial connector on the panel.

- For LTE/4G/3G/2G 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 PCS265 LTE. Refer to the drawing for connections.



External Antenna Connection

Use the ANTK4G LTE external antenna kit for PTCRB installations or to improve RF reception if your module’s signal strength is weak. External antenna kits and extension kits are purchased separately.

IP Module Connection

The PCS265 LTE can be connected to an IP Internet Module’s PCS port. For more information on how to configure this option, please refer to the IP module’s Installation manual.

Powering-up the PCS265 LTE

Once your hardware connections are completed, the PCS265 LTE module will begin its power up sequence.

- **Power** LED will turn solid green
- **Status** LED will be red and switch to green after approximately 10 seconds
- **SIM card 1** LED will slowly flash orange while searching for the GSM network; once found the LED will be solid orange

If configured for LTE/4G/3G/2G reporting, you will need to configure network provider information. Refer to the Programming section.

Note: The battery is optional. If a battery is used/installed, do not allow the battery to deplete and ensure that the battery is replaced when low.

The battery function is to support power shut down and not to be used as backup as defined in EN50131-6.

LED Functionality

LED	Functionality
SIM1 and SIM2*	Slow orange flashing - Searching the network Solid purple - LTE/4G Solid blue - 3G Solid orange - GSM Solid green - 2G (n/a for North and South America) Quick flashing - Exchanging data (the color of the flashing LED corresponds to the color of LTE/4G/3G/2G or GSM depending on which is being used) Off - SIM card 1 or 2 is not installed, not active, or currently not in use
Power	Solid green Off - No power
Status	Red - Error condition, no firmware Red/Green alternating - updating firmware Green - No error and/or battery fully charged Orange - Battery charging
Signal Strength	Three LEDs indicate network strength
All LEDs (except power)	Flashing - No data communication

*When using an e-bus connection, the LED is always orange.

Programming

In order to configure the PCS265 LTE 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.

LTE/4G/3G/2G Reporting (Serial Port or via SMS Connection ONLY)

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

Refer to the ***List of SMS Commands Table*** on page 2.

LTE/4G/3G/2G 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 = LTE/4G/3G/2G primary / landline backup (default) [7] On + [8] Off = landline only [7] On + [8] On = landline and LTE/4G/3G/2G in parallel	

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

Receiver Settings	EVO			
Receiver #:	1	2	3	4
IP address*				
IP port **				
IP address	[2984]	[2986]	[2988]	[2990]
WAN 2				
IP port WAN2				
Receiver password				
Security Profile				
Module registration Press **[ARM]** to register	[2985]	[2987]	[2989]	[2991]

* 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

Language	Value	Language	Value
English (default)	000	Bulgarian	016
French	001	Romanian	017
Spanish	002	Slovak	018
Italian	003	Chinese	019
Swedish	004	Serbian	020
Polish	005	Malay	021
Portuguese	006	Slovenian	022
German	007	Lithuanian	023
Turkish	008	Finnish	024
Hungarian	009	Estonian	025
Czech	010	French Canadian	026
Dutch	011	Belgian	027
Croatian	012	Latvian	028
Greek	013	Albanian	029
Hebrew	014	Macedonian	030
Russian	015		

SMS Programming

Refer to the panel's respective user manual for more information on SMS Personal Reporting.

Section	SMS Site Name Label
EVO	
[2954]	__/__/__/__/__/__/__/__/__/__/__/__/__/__/__/__
MG/SP	
[780]	__/__/__/__/__/__/__/__/__/__/__/__/__/__/__/__

List of SMS Commands

Please note that the default password is **admin**.

Command	Description
P[password].A[IP address].P[port number]	Used for LTE/4G/3G/2G remote access
P[password].IP.[call back phone number]	Used to obtain the IP address and IP port of the PCS265 LTE and whether or not the "bandwidth saver" option is being used
P[password].RESET	Used to power cycle the PCS265 LTE
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, LTE/4G/3G/2G 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.[CALL BACK PHONE NUMBER]	Used to view the SIM Card 2 Access Point Name information
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
P[password].[IP1W1/ IP1W2/ IP2W1/ IP2W2/ IP3W1/ IP3W2/ IP4W1/ IP4W2].[domain name]	Set domain name for LTE/4G/3G/2G receiver
P[password].[IP1W1/ IP1W2/ IP2W1/ IP2W2/ IP3W1/ IP3W2/IP4W1/ IP4W2] .CLEAR	Clear domain name for LTE/4G/3G/ 2G receiver
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 higher)
P[password].+++S	Enable SWAN polling (V4.10.011 and higher)

EN Certification

The following statements apply for EN 50131 and EN 50136 certification:

- Mode of operation is pass-through
- PCS265LTE must be installed and connected to an EN approved Grade 3 control panel
- Monitoring of the transmission network interface (Internet connection): In case of network/interface failure, the device sends a trouble message to the control panel which then displays it via connected keypad(s)
- Information Security is achieved by 256-bit encrypted, supervised communication (AES validation number 986) which prevents unauthorized reading or modification of messages
- Substitution Security is achieved by Information Security (as stated above), physical security (Tamper protection) and by a unique Serial Number from each device. Messages sent to the receiving station include the S/N in order to identify the substitution and alert accordingly

Technical Specifications

Specifications	Description
RF Power	Class 4 (2W) @ 850/1900 MHz Class 2 (1W) @ 1800/1900 MHz UMTS 850/1900 @ 0.25W (America) UMTS 900/2100 @ 0.25W (Europe)
Antenna Bandwidth	5 bands, wideband
Voltage Input	12 VDC nominal
Consumption during GPRS/GSM transmission	60 mA standby 300 mA maximum
Encryption	128-bit (AES)
SMS Protocol	7-bit (GSM: 3GPP TS 23.038/ GSM03.38) or 16-bit (UCS2 ISO/IEC10646)
SIM Cards	LTE/4G/3G GSM (2G - n/a for North and South America)
Humidity	0 - 90% non-condensing
Operating Temperature	-20 - 50 °C (-4 to 122 °F)
Dimensions	20.8 x 7.5 x 2 cm / 8.2 x 2.9 x 0.8 in.
Certifications	EN 50136-1 EN 50136-2 Grade 3 Class II EN 50131-10 ATS Category SP5 Certification Body: Applica Test and Certification

Safety Note: *This device may operate continuously in temperature of 55°C (*131°F*) for a maximum period of 7 days.*

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.