PARADOX

PCS265V8

LTE Communicator Module

INSTALLATION MANUAL

V8.0.072

Thank you for choosing Paradox Security Systems products. The following manual describes the connections and programming for the PCS265V8 Communicator Module. For any comments or suggestions, send an email to manualsfeedback@paradox.com.

Important Sim Card Charges

You must use a SIM card with a data charge limit. Paradox will not be responsible in any way for any usage charges of data or voice whatsoever.

Introduction

The PCS265V8 Communicator Module provides access to Paradox systems using the MQTT protocol. The PCS265V8 reports to the central station via Paradox IPC10 receivers only. Connecting to the system with BlueEye application (Insite Gold is NOT supported), or PC software.

THINGS YOU SHOULD KNOW, PLEASE READ:

While the PCS265V8 programming is similar to the PCS265V7, there are some differences you should know:

- The PCS265V8 uses MQTT protocol and cannot be combined with legacy IP devices, only IP180/IP150+ MQTT, and the latest BlueEye and PC versions support MQTT.
- The PCS265V8 reports in Contact ID format to the IPC10 (make sure the panel is set to Contact ID reporting) ONLY, and from IPC10 to CMS using MLR2-DG, Ademco 685 or Ademco CID-TCP.
- PCS265V8 supports and supervises up to three IPC10 reporting receivers.
- On panel ending with +, when only the PCS265V8 is used, connect to Serial-1. In the case of the IP module and PCS265V8 connected, connect the IP180/IP150+ MQTT to Serial-1 (main channel) and PCS265 V8 to Serial-2. It is not possible to mix MQTT reporting devices and previous reporting devices on the same panel.
- PCS265V8 is not compatible with EBUS for GSM, and SMS reporting.
- Combo mode (PCS connected to IP150) with PCS265V8 is not supported.

NOTES:

- **The IPC10 can only receive CONTACT ID format. Please make sure the reporting format is set to CID.**
- **PCS265V8 can be downgraded to V7.x firmware (TURN) If needed.**

Before You Begin

Make sure you have the following to configure your PCS265V8 Communicator Module:

- 4-pin serial cable (included)
- BlueEye app installed on your smartphone

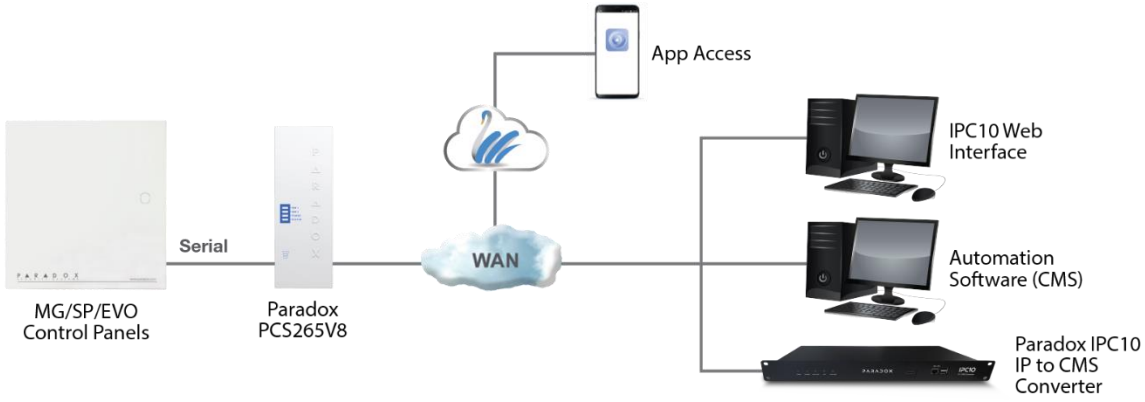
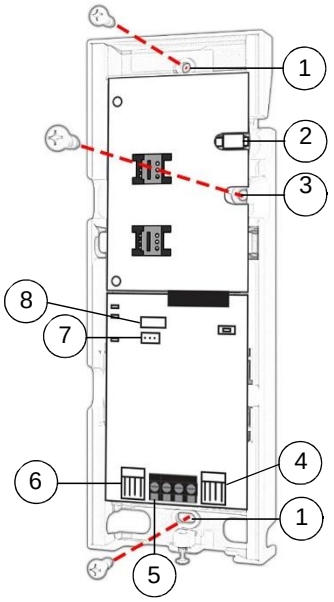


Figure 1

PCS265V8 Overview



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

Figure 2

Installation

The PCS265V8 can be installed on a variety of surfaces, using appropriate mounting hardware. Install the module as close to the panel as possible. Refer to Figure 2 for more information.

SIM Card Connection

The PCS265V8 supports two nano LTE provider SIM cards. To install the SIM cards, open the SIM Card tray and insert the card into base, as shown. SIM 1 is used as “Primary” and SIM 2 for “Backup”. If only one SIM card is used, insert into SIM 1.

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

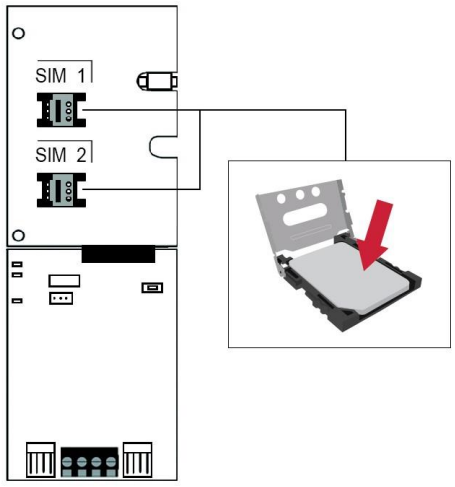


Figure 3

Panel Connections

Connect the PCS265V8’s serial out to the serial connector on the panel.

- For LTE reporting, connect to the Serial port of the panel.

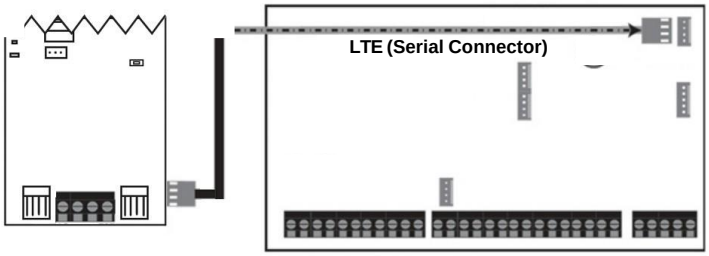


Figure 4

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.

Powering-up the PCS265V8

Once your hardware connections are completed, the PCS265V8 module will begin its power up sequence.

- **Power** LED will turn solid green.
- **Status** LED will turn solid green.
- **SIM card 1** LED will slowly flash red while searching for the GSM network; once found the LED will be solid purple.

When configured for LTE 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	Red flashing	No network
	Solid purple	LTE Internet present, polling to SWAN and received a connection identifier
	Flashing purple	Data exchange
	Flashing green	Updating firmware
	Flashing every 0.2 seconds	Internet present, polling to SWAN but did not receive a connection identifier
	Flashing every 0.5 seconds	Internet present, received a connection identifier but it is not polling to SWAN
	Flashing every one second	Internet present, not polling to SWAN and did not receive a connection identifier
	Off	No Internet connection
SIM2 (EVO)	Solid green	Registered to IP Receiver #1 only
	Solid Teal (Light Blue)	Registered to IP Receivers #1 and 2
	Solid purple	Registered to IP Receivers #1,2, and 3
	Solid orange	Registered to IP Receivers #1 and 3
SIM2 (MG/SP)	Solid green	Registered to IP Receiver #1 only
	Solid orange	Registered to IP Receivers #1 and 3
	Solid purple	Registered to IP Receivers #1,2, and 3
	Solid blue	Registered to IP Receivers #1 and 2
Power	Solid green	Power on
	Off	No power
Status	Solid green	Battery is charged at 80% or higher
	Flashing green	Battery charging
	Off	Battery is not connected
Signal Strength	Three LEDs indicate network signal strength	

Note: When upgrading the firmware remotely SIM1, SIM2, and Status LEDs will all flash green throughout the upgrade process.

Panel Communication Loss LED Functionality

LED	Functionality	
SIM1	Purple	On for three seconds then flashes green three times in a loop
SIM 2	Orange	Flashes three times every three seconds
Power	Solid green	On
Status	Red	Flashes three times every three seconds
RSSI	Green	All LEDs are on for three seconds then off for 1.5 seconds in a loop

Programming

In order to configure the PCS265V8 for reporting, you will need to first configure your SIM cards. Please note that SIM Card 1 can be configured via panel programming or SMS and SIM Card 2 via SMS only.

IP Reporting over LTE and SMS Personal Reporting

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.		

Refer to the *List of SMS Commands Table*.

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

Receiver Settings	MG/SP		
IP Receiver: IP address* IP port ** IP address WAN 2 IP port WAN2 Receiver password Security Profile	**1** [929] [930] [931] [932] [933] [934]	**2** [936] [937] [938] [939] [940] [941]	**Backup** [943] [944] [945] [946] [947] [948]
Module registration Press **[ARM]** to register	[935]	[942]	[949]
Receiver Settings	**EVO**		
IP Receiver: IP address* IP port ** IP password IP profile	**Main** [2984]	**Backup** [2986]	**Parallel** [2988]
		The IP profile for this receiver is the same as the Main receiver IP profile.	
Module registration Press **[ARM]** to register	[2985]	[2987]	[2989]
* 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			

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 remote access
P[password].IP.[call back phone number]	Used to obtain the IP address and IP port of the PCS265V8
P[password].RESET	Used to power cycle the PCS265V8
P[password].STATUS.[phone number]	Used to obtain the signal strength, signal quality, LTE 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 receiver
P[password].[IP1W1/ IP1W2/ IP2W1/ IP2W2/ IP3W1/ IP3W2/IP4W1/ IP4W2].CLEAR	Clear domain name for LTE receiver
C[user code].[ARM/OFF].A[area number], [area number], [area number]TO[area number]	Arm/Disarm
P[password].---S	Disable SWAN polling (V8.0 and higher)
P[password].+++S	Enable SWAN polling (V8.0 and higher)

EN Certification

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

- Mode of operation is pass-through.
- PCS265V8 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 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)
World Zone Compatibility	All except the U.S.A.
Antenna Bandwidth	5 bands, wideband
Voltage Input	12 VDC nominal
Consumption during LTE 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
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 temperatures of 55°C (*131°F) *for a maximum period of 7 days.*

Warranty

For complete warranty information on this product, please refer to the Limited Warranty Statement found on the Web site www.paradox.com/Terms. or contact your local distributor. Specifications may change without prior notice.

Patents