

3G9080 / 3G9080-EU / 3H9080 / LE9080 and GS9080 Cellular Alarm Communicator Installation Instructions

Important: Use this manual in conjunction with the PowerSeries Pro Reference Manual. Follow all safety instructions specified in the manual. Before operation, ensure that the panel is closed and fully assembled.

Safety information: All maintenance, except battery replacement, should be performed by service personnel only. Use only authorized accessories for this unit. Follow and adhere to all local electrical code guidelines. This manual contains information on limitations regarding the use and operation of the product, and limitations on the manufacturer's liability. Read the entire manual carefully. For additional warning information, refer to the PowerSeries Pro Alarm System Reference Manual. The communicator must be installed by service personnel and used in an environment with a maximum pollution degree of 2 and an overload category of II, in indoor, non-hazardous locations only. Follow these instructions and the instructions specified in the panel manual.

Model information: All models are compatible with the HS3032 and HS3128 control panels. The communicator supports internet protocol (IP) event transmission from the panel and communicator via HSPA/ GPRS or LTE. The communicators are compatible with the following Sur-Gard receivers: SG-System I V1.4+, SG-System II V2.14+, SG-DRL3-IP V2.36+, SG-DRL4-IP V1.29+, and SG-DRL5-IP V1.05+ (required for visual verification support).

Technical specifications

The following technical specifications apply to all models.

Input voltage: 3.4 - 4.2 V, 3.8 V nominal (supplied by HS3032 and HS3128 host alarm panels). **Suspend Mode Current:** 12 - 28 mA at 3.8 V.

Alarm current (transmitting): 750 mA at 3.8 V (average maximum).

Operating temperature: -10°C to 55°C. UL/ULC has only verified operation for a range of 0°C to 49°C.

Relative humidity: 5% to 93%, non-condensing.

Mechanical specifications: 81 x 61 x 11 mm (width x length x height); weight is 25 gr.

Model	Market	Operating frequency (MHz)	Typical antenna gain (dBi)
LE9080 - Certificate by UL/ULC	Canada, USA	3G - B5: UL: 824 - 849, DL: 869 - 894 B2: UL: 1850 - 1910, DL: 1930 - 1990 4G - B12: UL: 699 - 716, DL: 729 - 746 B13: UL: 777 - 787, DL: 746 - 756 B5: UL: 824 - 849, DL: 869 - 894 B4: UL: 1710 - 1755, DL: 2110 - 2170 B2: UL: 1850 - 1910, DL: 1930 - 1990	1.3 6.8 1.2 2.2 1.3 4.6 6.8
3G9080 - UL/ULC certificate	Argentina, Canada, USA	2G - B5: UL: 824 - 849, DL: 869 - 894 B2: UL: 1850 - 1910, DL: 1930 - 1990 3G - B5: UL: 824 - 849, DL: 869 - 894 B2: UL: 1850 - 1910, DL: 1930 - 1990	1.4 6.7 1.4 6.7
3G9080-EU - Compliant with CE	Europe	2G - B8: UL: 880 - 915, DL: 925 - 960 B3: UL: 1710 - 1785, DL: 1805 - 1880 3G - B8: UL: 880 - 915, DL: 925 - 960 B1: UL: 1920 - 1980, DL: 2110 - 2170	2.0 4.6 2.0 6.7/2.8
GS9080 - CE Compliant	Europe	2G - B8: UL: 880 - 915, DL: 925 - 960 B3: UL: 1710 - 1785, DL: 1805 - 1880	2.0
3H9080 - UL/ULC listed	Canada, USA	3G - B5: UL: 824 - 849, DL: 869 - 894 B2: UL: 1850 - 1910, DL: 1930 - 1990	1.3 6.8

Inserting and removing the SIM card

Be careful when handling the SIM card. To prevent damage to the SIM card, make sure there are no bent or scratched contacts.

To insert and remove the SIM card, complete the following steps:

1. To insert and remove the SIM card, slide it in and out of the holder. The slot in the corner of the SIM card must be aligned with the slot at the base of the holder.

Installing and replacing the communicator

Note: Before installing the communicator, check with your local service provider to see if there is an available and active network in the area.

Open the unit

To open the unit complete the following step:

1. Disconnect power to the panel by removing the power cable and battery.

Installing the communicator

To install the communicator, complete the following steps.

1. On the new communicator, if necessary, remove the protective metal tab from the 24-pin CON1 connector.
2. Align the three holes in the communicator module with the plastic pins on the alarm panel, making sure the 24-pin connectors are aligned with the corresponding pins on the panel. See Figure 3.

3. Carefully press the module against the alarm panel.
4. To secure the antenna, place a nylon washer on each side of the hole in the panel and screw the cable to the antenna. See Figures 4 and 5.
5. Gently press the Main cable connector of the main antenna into the pin identified as JK2 - Diversity onto the PCB. Repeat this step for the antenna, and connect it to the pin identified as JK1 - Diversity antenna on the PCB.

6. Apply power to the panel by plugging in the power supply module.

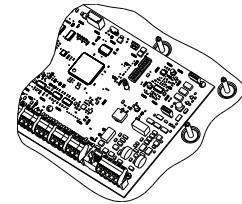
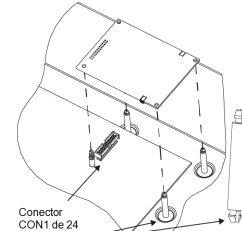


Figure 1: Panel preparation



Inserte este extremo del separador en la posición indicada. El separador hará un clic audible cuando se coloque correctamente.

Figure 3: Installing the communicator

Replacing the communicator

Note: For panels with a communicator installed, you can use the foam pad in the unit or the foam pad provided in the standalone cellular communicator kit.

To replace the communicator, complete the following steps.

1. Disconnect power to the panel by unplugging the transformer and battery.
2. Carefully remove the main and diversity antenna cables from the PCB.
3. Release the standoffs and pull up on the communicator to remove it from the connector.
4. Complete steps 1-6 in Installing the Communicator.

Communicator Settings

For information on configuring the communicator, see the PowerSeries Pro Alarm System Reference Manual.

Placement test

To ensure that the communicator is active with a strong signal connection, place the PowerSeries Pro panel in the intended location and perform the following steps.

1. Make sure the SIM card has been activated.
2. Using the keypad, enter the location test through installer programming: [*] [8] [Location Code] installer] [850].
3. Observe and record the number of bars displayed on the LCD keypad.
4. Compare it to the number of bars indicated in the CSQ Levels column shown in the following table.
5. If 3 or more bars are observed, the location is good and no further action is required.
6. If 2 bars or less are displayed, the location is poor and the communicator may need to be relocated, or You can use an external antenna extension kit to improve the signal strength.

Signal strength	CSQ Level	Signal level [dBm]	Installer Action
5 bars	14 and older	-84 and older	The location is GOOD.
4 bars	11 to 13	-90 to -85	
3 bars	7 to 10	-98 to -91	
2 bars	5 to 6	-102 to -99	The location is BAD. Not suitable for cellular operation
1 bar	1 to 4	-108 to -103	
No signal	0	-108.8	Check if cellular coverage is active in your area.

Display of faults

For information on how to view troubles, see the PowerSeries Pro Alarm System Reference Manual.

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Digital Security Controls (DSC) warrants that for a period of 12 months from the date of purchase, the product will be free from defects in materials and workmanship under normal use and that upon any breach of such warranty, DSC will, at its option, either repair or replace the defective equipment by returning the equipment to the repair facility. This warranty is valid only for defects in parts and workmanship and not for damage incurred during shipping or handling, or damage due to causes beyond the control of Digital Security Controls such as lightning, excessive voltage, mechanical shock, water damage, or damage arising from abuse, alteration or misapplication of the equipment. The present warranty shall apply only to the original purchaser, and shall be in lieu of all other warranties, whether express or implied, and all other obligations or liabilities on the part of Digital Security Controls. Digital Security Controls neither assumes nor authorizes any other person to act on its behalf to modify or change this warranty, or to assume any liability for any damages arising from the use of this warranty.

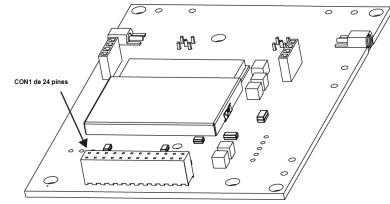


Figure 2: Communicator preparation

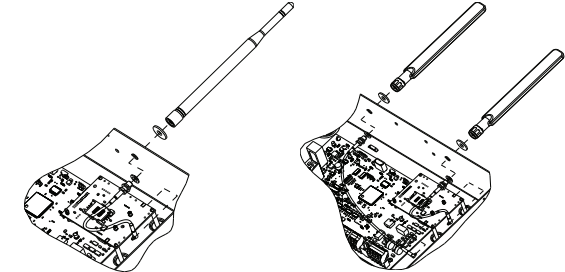


Figure 4: Installing an antenna

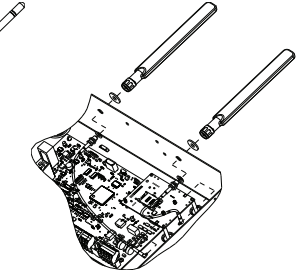


Figure 5: Installation of two antennas

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FCC/ISED CANAD INTERFERENCE STATEMENT -This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must not accept any interference that may cause undesired operation of the device. This device complies with ISED Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must not accept any interference that may cause undesired operation of the device.

The present appareil is conform to CNR d'ISED Canada applicable to radio appareils exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radio électrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

FCC CLASS B DIGITAL DEVICE NOTICE this equipment has been tested and complies with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. Operation of this equipment may generate and radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help. CAN ICES-3 (B) / NMB-3 (B)

Model LE9080 FCC ID: F5318LE9080 IC: 160A-LE9080
Model 3G9080 FCC ID: F53173G9080 IC: 160A-3G9080
Model 3H9080 FCC ID: F53183H9080 IC: 160A-3H9080
Note: Only models LE9080, 3G9080 and 3H9080 are UL/ULC certified.

CANADA FCC/ISED WIRELESS NOTICE

This equipment complies with FCC and ISED Canada radiation exposure limits set forth for an uncontrolled environment.

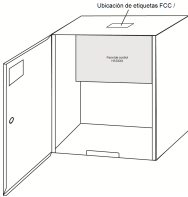
The antenna should be installed and operated with a minimum distance of 20 cm between the radiator and your body. Cet appareil est conform aux limites d'exposition aux ray-onnements de la ISED Canada pour un environnement non contrôlé. The antenne doit être installée de façon à garder a minimum distance of 20 centimètres between the source of rays and your bodies.

The antenna gain must be less than: Gain de l'antenne doit être ci-dessous:

Frequency band	LE9080		3G9080 3H9080	
GSM850/FDD V	1.3 dBi		1.4 dBi	1.3 dBi
PCS1900/FDD ii	6.8 dBi		6.7 dBi	
LTE (B2)	6.8 dBi			
LTE B4	4.6 dBi			
LTE B5/B12/B13	1.3 / 1.2 / 2.2 dBi			

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. The transmitter must not be colocalisé ni fonctionner conjointement avec à other antenne ou autre émetteur.

FCC/IC LABEL: This LE9080, 3G9080, or 3H9080 modular transmitter is labeled with its own FCC ID and IC. When the module is installed inside the HS3256, HS3128, or HS3032 host device and the module's FCC ID/IC is not visible, the host device will display the provided label referring to the attached module's FCC ID and IC. This label is shipped with the module and it is the integrator's responsibility to apply it to the outside of the enclosure as shown in the figure below. The LE9080, 3G9080, or 3H9080 transmitter module is labeled with its own FCC ID and IC number. The module is installed inside the device of the HS3256, HS3128 or HS3032 and the FCC ID / IC of the module is not visible, the device of the affiche the four labels refers to the FCC ID and IC of the ci-joint module. This label is available with the module and is responsible for the integration of the application to the exterior of the content, as indicated in the figure below.



Model LE9080 contains FCC ID: F5318LE9080 and IC: 160A-LE9080
Model 3G9080 contains FCC ID: F53173G9080 and IC: 160A-3G9080
Model 3H9080 contains FCC ID: F53183H9080 and IC: 160A-3H9080

SIMPLIFIED DECLARATION OF CONFORMITY: Hereby, Tyco Safety Products Canada Ltd declares that this radio equipment is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address.

Note: Applies only to models 3G9080-EU and GS9080.

Model 3G080-EU - <http://dsc.com/pdf/1804001>

Model GS9080 - <http://dsc.com/pdf/1804002>

Operating frequency bands and maximum transmitted radio frequency power:

Frequency band (MHz)	Maximum power
EGSM900 890.0 - 914.8 EGSM900	Class 4 (2 W) for GSM: 900 MHz Class 1
880.2 - 889.8 DSC1800 1710.2 -	(1 W) for GSM: 1800 MHz Class E2 (0.5
1784.8 WCDMA (band VIII) 882.4 -	W) for EDGE: 900 MHz Class E2 (0.4 W)
912.6	for EDGE: 900 MHz

Single contact address in Europe: Tyco Safety Products, Voltaweg 20, 6101 XK Echt, The Netherlands.

Notes for installations compliant with EN50136-1:2012 (applicable to 3G9080-EU and GS9080 models only): the Models 3G9080-EU and GS9080 connect to compatible DSC alarm control panels HS3128, HS3032 using DSC's proprietary serial interface. The module operates in transit mode and confirms the alarm to the compatible control panel after that a confirmation has been received from the compatible alarm receiver.

1. The 3G9080-EU, GS9080 module is monitored by the control panel and programmed through the programming menu available from compatible keypad connected to HS3128, HS3023 alarm control panel. The module is connected according to is shown in the diagram included in this manual.
2. The HSPA 3G/GSM Cellular route is immune to conducted and radiated RF fields with levels up to 10 V/m according to the tests of EN50130-4 Standard.
3. The 3G9080-EU, GS9080 module complies with radiated emissions levels for Class B equipment according to the standards EN61000-6-3 / EN55032 / CISPR32.
4. The 3G9080-EU module has only one communication path: HSPA 3G or GSM. Cellular communication path using 900 / 1200 Mbps. 1800/2100MHz Public Cellular Network. The HSPA 3G/GSM cellular communication path that can be used in an ATS with the following categories:
 - 1. SP4 Single Path mode or
 - 2. DP2 Dual Route mode in combination with the compatible HS3128/HS3032 control panel integrated into the communicator PSTN or
 - 3. DP3 Dual Path mode together with HS3128/HS3032 compatible control panel integrated Ethernet communicator.
5. The 3G9080-EU, GS9080 has been tested to meet the following applicable standards: EN50136-1:2012, EN50136-2:2013, EN50131-10:2014, ATS configuration: SP3, DP2, DP3. For EN50131-1:2006 / A1:2009 / A2:2017 compliant installations the following programming options shall be set as described: Heartbit supervision set to 180 s for SP4 and DP4 configurations along with ARC receiver supervision window set to 180s. For DP2 configuration supervision shall be set to 30 min. 3G9E80-EU, GS9080 has been certified by Telefication according to EN50131-1:2006/A1:2009/A2:2017, EN50131-10:2014 for Grade 2, Class II and EN50136-2:2013 requirements. Configuration: SP4, DP4.

