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

Important: Use this manual in conjunction with the PowerSeries Commercial Reference Manual. Observe all the safety instructions specified in the manual. Before operation, ensure that the panel is fully assembled and closed. Safety information: All servicing, except backup battery replacement, must be performed by a service person only. Use only authorized accessories with this equipment. Observe and respect all rules imposed by local electrical codes. This manual contains information on limitations regarding product use and function, and on the limitations as to the liability of the manufacturer. Read the entire manual carefully. For warning information, refer to the PowerSeries Commercial alarm system Reference Manual. The communicator must be installed by service persons only and used in an environment that provides a maximum pollution degree of 2 and an overvoltages category II in non-hazardous, indoor locations only. Observe these instructions and the instructions specified within the panel manual

Model information: All models are compatible with the control panels HS3032 and HS3128. The communicator supports Internet Protocol (IP) transmission of panel and communicator events over HSPA/GPRS or LTE. The communicators are compatible with the following Sur-Gard receivers: SG-System I VI.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, nominal 3.8 V (provided by the host alarm panels HS3032 and HS3128). Standby current: 12 - 28 mA @ 3.8 V.

Alarm (transmitting) current:750 mA @ 3.8 V (max avg).

Operating temperature: -10 °C to 55 °C. UL/ULC has only verified operation for range 0-49°C. Relative humidity: 5% to 93%, noncondensing.

# Mechanical specifications: 81 x 61 x 11 mm (W x L x H); weight is 25 g.

Model	Market	Operating frequency (MHz)	Typical antenna gain
LE9080 - UL/ULC listed	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 B3: 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 dBi 6.8 dBi 1.2 dBi 2.2 dBi 1.3 dBi 4.6 dBi 6.8 dBi
3G9080 - UL/ULC listed	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	XXXXX
3G9080-EU - CE compliant	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	XXXXX
GS9080 - CE compliant	Europe	2G - B8: UL: 880 - 915, DL: 925 - 960 B3: UL: 1710 - 1785, DL: 1805 - 1880 B2: UL: 1850 - 1910, DL: 1930 - 1990	XXXX
3H9080 - UL/ULC listed	Canada, USA	3G - B5: UL: 824 – 849, DL: 869 – 894 B2: UL: 1850 – 1910, DL: 1930 – 1990	1.3 dBi 6.8 dBi

# Inserting and removing the SIM card

🖞 Use caution when you handle the SIM card. To avoid damage to the SIM card, ensure that there are no bent or scratched contacts.

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

 Insert or remove the SIM card by sliding it in or out of the holder. The notch on the corner of the SIM card must align with the notch on the base of the holder

# Installing and replacing the communicator

Note: Before installing the communicator, confirm with the local service provider that there is an available and active network in the area.

#### Opening the unit

To open the unit, complete the following step:

Disconnect power from the panel by removing the power cord and battery.

## Installing the communicator

To install the communicator, complete the following steps.

- On the new communicator, if required, remove the protective metal tab from the 24-pin CONI header.
- Align the three holes on the communicator module with the plastic pegs on the alarm panel, ensuring the 24-pin

connectors are aligned with matching pins on the panel. See Figure 3.

- Press the module carefully onto the alarm panel.
- To attach the antenna place a nylon washer on either side of the hole on the panel and screw the cable into the antenna. See Figures 4 and 5.

5. Gently press the main antenna cable connector into the jack labeled JK2 - Main Ant on the PCB. Repeat this step for the diversity antenna, and connect to the jack labeled JK I - Div Ant on the PCB.

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

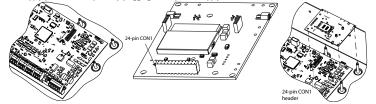


Figure 1: Preparing the panel

Figure 3: Installing the communicator Figure 2: Preparing the communicator

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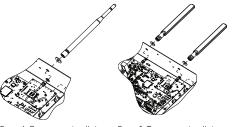


Figure 4: One antenna installation Figure 5: Two antenna installation

# 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.
- Disconnect power from the panel by unplugging the transformer and battery.
- Gently remove the main and diversity antenna cables from the PCB.
- Release the stand-offs and pull up on the communicator to remove it from the header. Complete steps I- 6 in Installing the Communicator.

# Communicator configuration

For information on how to configure the communicator, refer to the PowerSeries Commercial alarm system

# Reference Manual

**Placement test** 

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

- Ensure the SIM card has been activated.
- Using the keypad, enter placement test through installer's programming: [\*][8][Installer Code][850].
- View and record the number of bars showing on the LCD keypad.

Compare with the number of bars indicated in the CSQ Levels column shown in the following table. If 3 or more bars are shown, the location is good and no further action is required.

If 2 or less bars are shown, the location is poor and the communicator may need to be relocated, or an external antenna extension kit can be used to improve the signal strength.

Signal strength	CSQ level	Signal level (dBm)	Installer action
5 bars	14 and higher	-84 and higher	Location is GOOD.
4 bars	II to I3	-90 to -85	
3 bars	7 to 10	-98 to -91	
2 bars	5 to 6	-102 to -99	Location is BAD. Not suitable for Cellular operation
l bar	I to 4	-108 to -103	
No signal	0	-108.8	Check if Cellular coverage is active in your area.

Viewing troubles

For information on how to view troubles, refer to the PowerSeries Commercial alarm system Reference Manual. Limited warranty

Digital Security Controls (DSC) warrants that for a period of 12 months from the date of purchase, the product shall be free of defects in materials and workmanship under normal use and that in fulfilment of any breach of such warranty, DSC shall, at its option, repair or replace the defective equipment upon return of the equipment to its repair depot. This warranty applies only to defects in parts and workmanship and not to damage incurred in 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 out of abuse, alteration or improper application of the equipment. The foregoing warranty shall apply only to the original buyer, and is and shall be in lieu of any and all other warranties, whether expressed or implied and of all other obligations or liabilities on the part of Digital Security Controls. Digital Security Controls neither assumes responsibility for, nor authorizes any other person purporting to act on its behalf to modify or to change this warranty, nor to assume for it any other warranty or liability concerning this product. In no event shall Digital Security Controls be liable for any direct, indirect or consequential damages, loss of anticipated profits, loss of time or any other losses incurred by the buyer in connection with the purchase, installation or operation or failure of this product. Warning: Digital Security Controls recommends that the entire system be completely tested on a regular basis. However, despite frequent testing, and due to, but not limited to, criminal tampering or electrical disruption, it sible for this product to fail to perform as expected.

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Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device. This device complies with ISED Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference and (2) this device must accept any interference, including interference that may cause undesired operation of the device. Le présent appareil est conforme aux CNR d'ISED Canada applicables aux appareils radio 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 comprom-ettre le fonctionnement. FCC CLASS B DIGITAL DEVICE NOTICE-This equipment has been tested and found to comply 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. This equipment generates uses and can 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 experienced radio/television 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 listed.

FCC/ISED CANADA 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 minimum distance of 20 cm between the radiator and your body. Cet appareil est conforme aux limites d'exposition aux ray-onnements de la ISED Canada pour un environnement non contrôlé. L'antenne doit être installé de façon à garder une distance minimale de 20 centimètres entre la source de rayonnements et votre corps

Antenna gain must be below. Gain de l'antenne doit être ci-dessous:

Frequency band/Bande de fréquence LE9080 3G9080 LE2077

GSM850/FDD V	xx dBi	xx dBi	xx dBi		
PCSI 900/FDD ii	xx dBi	xx dBi	xx dBi		
LTE B2	xx dBi	xx dBi	xx dBi		
LTE B4	xx dBi	xx dBi	xx dBi		
LTE B5/B12/B13	xx dBi	xx dBi	xx dBi		
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This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. L'émetteur ne doit pas

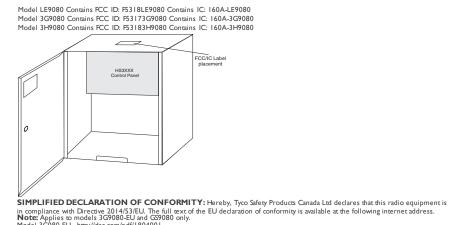
être colocalisé ni fonctionner conjointement avec à autre antenne ou autre émetteur. FCC/IC LABEL:This modular transmitter LE9080, 3G9080 or 3H9080 is labeled with its own FCC ID and IC number. When the module is installed inside the host device HS3256, HS3128 or HS3032 and the FCC ID/IC of the module is not visible, the host device shall display the provided label referring to the FCC ID and IC of the enclosed module. This label is shipped together with the module and it is the responsibility of the integrator to apply it to the exterior of the enclosure as displayed in the following figure. Le modulaire émetteur LE9080, 3G9080 ou 3H9080 estédiqueté avec son propre ID FCC et le numéro IC. Lorsque le module est installé à l'intérieur du dispositif hôte HS3256, HS3128 ou HS3032 et la FCC ID / IC du module ne soit pas visible, le

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# 3G9080/3G9080-EU/3H9080/LE9080 and GS9080 Cellular Alarm 20010165R001 Communicator Installation Instructions

dispositif d'accueil affiche l'étiquette fournie se référant à l'ID FCC et IC du module ci-joint. Ce label est livré avec le module et il est de la responsabilité de l'intégrateur de l'appliquer à l'extérieur de l'enceinte, comme indiqué dans la figure suivante.



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 to models 3G9080-EU and G59080 only. Model 3G080-EU - http://dsc.com/pdf/1804001 Model G5080 - http://dsc.com/pdf/1804002 Operating frequency bands and related max radio-frequency power transmitted:

1 0 1 /	1 71
Frequency band (MHz)	Maximum power
EGSM900 890.0 - 914.8	Class 4 (2 W) @ 900 MHz, GSM
EGSM900 880.2 - 889.8	Class I (I W) @ 1800 MHz, GSM
DSC1800 1710.2 - 1784.8	Class E2 (0.5 W) @ 900 MHz, EDGE
WCDMA (band VIII) 882.4 - 912.6 European single point of contact	Class E2 (0.4 W) @ 900 MHz, EDGE t: Tyco Safety Products, Voltaweg 20, 6101 XK Echt, Netherlands.



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