

LRR SG Module US - Integration Manual -

**MSA North America
Cranberry Plant**
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General description

The module is complaint to FCC 15.247. It is a one sided assembly and has a castellated form factor. The nominal power supply input voltage of the module is 3.3V.

Statement according to FCC part 15.105:

NOTE: 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 an experienced radio/TV technician for help.

Statement according to FCC part 15.19:

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Statement according to FCC part 15.21:

Modifications not expressly approved by this company could void the user's authority to operate the equipment.

OEM installer and professional end user must provide with the following statements:

The unlicensed module has an ISED & FCC label on the module itself. The label must be visible through a window or it must be visible when an access panel, door or cover is easily removed.

If not, a second label must be placed on the outside of the device that contains the following text:

Contains FCC ID: RPN-10184341

Contains IC: 324C-10184341

Statement according to RSS-247

This device complies with Industry Canada's licence-exempt RSSs. 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'Industrie 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;*
- 2) l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.*

Integration instructions for host product manufacturers according to KDB 996369 D03
OEM Manual v01

1. List of applicable FCC rules

FCC Part 15.247

2. Specific operational use conditions

VDD should be 3.3 V +/- 10%

Operating Temperature is -40 to 85 ° C

3. Limited module procedures

The module is only approved for use when installed in devices produced by the MSA companies.

MSA The Safety Company, as the approval holder, has to ensure that all other MSA facilities do fulfill the installation requirements according to this description when using this module in other applications.

4. Trace antenna designs

See # 6.

5. RF exposure considerations

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This compliance to FCC radiation exposure limits for an uncontrolled environment.

The host product manufacturer would provide the above information to end users in their end-product manuals. Specifically the RPN-10184341, Model "LRR SG Module US" is being installed in the body-worn portable G1 SCBA host device, intended to be used with a separation distance of less than 20 cm from persons.

6. Antennas

The module may only be operated with the following antenna(s) with which it is authorized.

Whip Antenna:

gain of the antenna 4 dBi

frequency range 902-970 MHz

Taoglas PC23 trace antenna

gain of the antenna 0 dBi

frequency range 850/900/1800/1900 MHz

Monopole Wire Antenna

gain of the antenna 3.51 dBi

frequency range 800-960 MHz

7. Label and compliance information

The end product must carry a physical label or shall use e-labeling followed KDB784748D01 and KDB 784748 stating "Contains FCC ID: RPN-10184341".

8. Information on test modes and additional testing requirements.

For more information on testing, please contact the manufacturer.

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9. Additional testing, Part 15 Subpart B disclaimer

The modular transmitter is only FCC authorized for the specific rule parts (FCC Part 15.247) listed on the grant, and that the host product manufacturer is responsible for compliance to any other FCC rules that apply to the host not covered by the modular transmitter grant of certification. The final host product still requires Part 15 Subpart B compliance testing with the modular transmitter installed when contains digital circuitry.