





Compliance Statement (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.

Warning (Part 15.21)

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC Interference Statement (Part 15.105 (b)

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 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.

This portable transmitter with its antenna complies with FCC/IC RF exposure limits for general population / uncontrolled exposure.

Section 7.1.5 of RSS-GEN

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.

Section 7.1.4 of RSS-GEN

This device has been designed to operate with the antenna(s) listed below, and having a maximum gain of 2.0 dB. Antennas not included in this list or having a gain greater than 2.0 dB are strictly prohibited for use with this device. The required antenna impedance is 50 ohms.

List of all Antennas Acceptable for use with the Transmitter

20AWG Insulated tinned-Cu wire 3.82in (97.0mm). Nearson S467AH-915 (SMA rev polarity).

Section 7.1.5 of RSS-GEN

To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that permitted for successful communication.

Federal Communication Commission Interference Statement

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 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.

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.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

INDUSTRY CANADA STATEMENTS

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.

To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that permitted for successful communication.

This device has been designed to operate with the antennas listed <u>below</u>, and having a maximum gain of 2.0 dB. Antennas not included in this list or having a gain greater than 2.0 dB are strictly prohibited for use with this device. The required antenna impedance is 50 ohms.

List of all Antennas Acceptable for use with the Transmitter

- 20AWG Insulated tinned-Cu wire 3.82in (97.0mm).
- Nearson S467AH-915 (SMA rev polarity).

OEM Responsibilities to comply with FCC and Industry Canada Regulations

The **0H7699** Module has been certified for integration into products only by OEM integrators under the following conditions:

1. The transmitter module must not be co-located or operating in conjunction with any other antenna or transmitter.

As long as the two conditions above are met, further transmitter testing will not be required. However, the OEM integrator is still responsible for testing their end-product for any additional compliance requirements required with this module installed (for example, digital device emissions, PC peripheral requirements, etc.).

IMPORTANT NOTE: In the event that these conditions cannot be met (for certain configurations or co-location with another transmitter), then the FCC and Industry Canada authorizations are no longer considered valid and the FCC ID and IC

Certification Number cannot be used on the final product. In these circumstances, the OEM integrator will be responsible for re-evaluating the end product (including the transmitter) and obtaining a separate FCC and Industry Canada authorization.

End Product Labeling

The **0H7699** Module is labeled with its own FCC ID and IC Certification Number. If the FCC ID and IC Certification Number are not visible when the module is installed inside another device, then the outside of the device into which the module is installed must also display a label referring to the enclosed module. In that case, the final end product must be labeled in a visible area with the following:

"Contains Transmitter Module FCC ID: VDE-0H7699" "Contains Transmitter Module IC: 8036A-0H7699" or "Contains FCC ID: VDE-0H7699" "Contains IC: 8036A-0H7699"

The OEM of the **0H7699** Module must only use the approved antenna(s) listed above, which have been certified with this module.

The OEM integrator has to be aware not to provide information to the end user regarding how to install or remove this RF module or change RF related parameters in the user manual of the end product.

Specifications		
Performance:		
Operating Frequency		ISM Band 902-928MHz
Outdoor RF line-of-sight range		External dipole antennas: 430 ft (131 m)
Outdoor to Indoor (through wall) range		100 ft to wall, 100 ft inside building (typical).
		Range inside building will vary according to:
		Distance of outdoor transceiver from
		outdoor/indoor interface (wall).
		• Type of interface i.e. brick, aluminum
		siding, stone, tinted windows using
		metalized tint.
		• Orientation of transceiver antennas (to
		• Number and type of internal walls
		• Number and type of internal wans, between transceivers, within building
Transmit Power Output		Internal antenna: -2.8 dBm
Transmit Fower Output		External dipole antenna -5.3 dBm
Throughput Data rate		2400 baud
Receiver Sensitivity		-102 dBm
Power Requirements:		
Supply Voltage (Regulated)		3 ± 0.15 Vdc
Receive Current		13.6mA
Transmit Current		25.4mA
Standby Current		< 500nA
General:		
Dimensions		1.25in x 1.05in x 0.16in
	1	(32.0mm x 26.5mm x 4.2mm)
Weight	without SMA connector	0.2oz (6g)
	with SMA connector	0.3oz (9g)
Antenna Options	without SMA connector	Insulated tinned-Cu wire 3.82in (97.0mm),
		stripped 0.12in (3.0mm).
	with SMA connector	Nearson S467AH-915 (SMA rev polarity)
Operating Temperature		-40°C to +85°C
Agency Approvals:		
FCC Part 15.249		VDE-0H7699
Industry Canada (IC)		8036A-0H7699