



BlackBerry Radar R2 IS

ITK100 – 1

March 2024












Safety Information

Before you start using the BlackBerry Radar R2 IS™ device (herein after referred to as device), review the safety and regulatory information provided in this document. Keep this document in a safe place so that you can refer to it whenever you need it.

In some countries there may be restrictions on using wireless devices with encryption software. Check with your local authorities for the restrictions in your area.

To find the latest safety and product information, visit:
docs.radar.blackberry.com/guides/user_guide_safety

Important safety precautions

	Do not use the device or magnet near medical devices, including pacemakers and hearing aids, because they might malfunction and cause serious harm or death to you or others.
	Do not dispose of the device, in a fire because this might cause an explosion resulting in serious injury, death, or property loss.
	Do not attempt to install the device or open the device when an explosive atmosphere is present.
	The device is designed to be operated in temperatures between -40 and 85°C (-40 and 185°F). Store device in temperatures between 10 and 30°C (14 and 86°F) and 0-50% humidity. Do not expose the device to temperatures above 100°C (212°F). Use of the device outside of the recommended temperature range could cause damage to the device or lithium-metal battery.
	Do not submerge the device in water.
	Do not puncture, crush, or expose battery to severe physical shock. Do not attempt to disassemble battery pack. Do not short-circuit the battery or allow metallic or conductive objects to contact the battery terminals.
 	Under certain extreme circumstances, the non-metallic parts incorporated in the enclosure of this equipment may generate an ignition-capable level of electrostatic charge. Therefore, the equipment shall not be installed in a location where the external conditions are conducive to the build-up of electrostatic charge on such surfaces. In addition, the equipment shall only be cleaned with a damp cloth.
	Exposure to some chemicals may degrade the sealing properties of materials used in the device. Avoid exposing your device to these chemicals.
	This equipment is not suitable for use in locations where children are likely to be present.
	Keep device magnets away from small children. Potential choking hazard.

Product information: BlackBerry Radar R2 IS ITK100-1

Intrinsic safety warnings

Warning markings
WARNING—DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT
WARNING—POTENTIAL ELECTROSTATIC CHARGING HAZARD—SEE INSTRUCTIONS
WARNING – DO NOT REMOVE OR REPLACE WHILE CIRCUIT IS LIVE UNLESS THE AREA IS KNOWN TO BE FREE OF IGNITABLE CONCENTRATIONS OF FLAMMABLE GASES OR VAPORS

Mechanical properties:

Weight: Approximately 407 g (14.3 oz.)

Size: (L x W x H): 169 x 94 x 43 mm (6.7 x 3.7 x 1.7 in.)

Electrical rating / Battery specifications:

Battery operated device

Non-rechargeable lithium-metal battery

3.6V, 19Ah nominal

Environmental properties:

Enclosure Type: IP67/IP69K

Operating Temperature Range: -40 to 85°C (-40 to 185°F)

IECEX/ATEX/cETLus Temperature Range: -40 to 70°C (-40 to 158°F)

Hazardous locations

Hazardous location markings		
IECEX	ATEX	cETLus
Ex ia IIC T4 Ga	CE 2903	Class I, Division 1, Groups A, B, C, D ; T4
Ex ia IIIC T135°C Da	Ex II 1GD	Class I, Division 2, Groups A, B, C, D ; T4
	Ex ia IIC T4 Ga	Class II, Division 1, Groups E, F, G ; T4
	Ex ia IIIC T135°C Da	Class I, Zone 0, AEx ia IIC T4 Ga
		Zone 20, AEx ia IIIC T135°C Da
		Ex ia IIC T4 Ga
		Ex ia IIIC T135°C Da

Relevant standards

Standards	
IECEX	Subject
IEC 60079-0:2017 Ed. 7	Part 0: Equipment – General requirements
IEC 60079-11:2011 Ed. 6	Part 11: Equipment protection by intrinsic safety "i"
ATEX	
EN IEC 60079-0:2018	Part 0: Equipment – General requirements
EN 60079-11:2012	Part 11: Equipment protection by intrinsic safety "i"
cETLus	
CSA C22.2 No. 60079-0:2019 UL 60079-0:2019	Part 0: Equipment – General requirements
CSA C22.2 No. 60079-11:2014 CSA C22.2 No. 60079-11:2013	Part 11: Equipment protection by intrinsic safety "i"
UL 913- 8 th Edition ANSI/ISA–12.12.01–2000	Intrinsically Safe Apparatus and Associated Apparatus for Use in Class I, II, and III, Division 1, Hazardous (Classified) Locations

Radio specifications:

No cellular modem. 915 MHz: 903~927 MHz. 2.4 GHz and mmwave support.

Radio specification	MAX radio conducted power information (EIRP):
915 MHz: 903~927 MHz	915 MHz: 18.86 dBm
2.4 GHz: 2405~2480 MHz	2.4 GHz: 19.08 dBm
mm wave: 77-81 GHz	78.82 GHz: 24.72 dBm, 78.98 GHz: 24.14 dBm

Operating temperature and humidity

The BlackBerry Radar R2 IS device is designed for the following temperature and humidity ranges:

Operation:	Storage:
Temperature: (-40 to 85°C) -40 to 185°F	Temperature: -10 to 30°C (14 to 86°F)
Humidity: 0-100%	Humidity: 0-50%

Battery safety

The device contains a non-rechargeable, Lithium Metal battery. Do not attempt to recharge the battery.

The battery might present a fire, explosion, chemical burn, or other hazard if mistreated. Do not put the battery in contact with liquids. Do not heat the battery above 100°C (212°F). Heating the battery above 100°C (212°F) could cause the battery to catch fire or explode.

Antennas



Use only the supplied integrated antennas. Unauthorized antenna modifications or attachments could damage the device and might violate U.S. Federal Communications Commission (FCC) or other regulations.

Repair and maintenance

Do not attempt to modify, disassemble, or service the device. Do not attempt to recharge the battery. Only qualified service personnel should perform repairs to the device.

Failure to observe all safety instructions contained in the user documentation for the device will void the Limited Warranty and might lead to suspension or denial of services to the offender, legal action, or both.

Device, magnet, and battery disposal

	<p>Do not dispose of the device, magnet, or battery, in household waste bins or in a fire.</p> <p>Please dispose of magnets in accordance with the laws and regulations in your area. All permanent magnets should be thermally demagnetized prior to disposal or placed in a steel container prior to disposal so the magnets do not attract waste disposal equipment or refuse container.</p>
	<p>The device and battery are recyclable where facilities exist. This symbol is not intended to indicate the use of recycled materials.</p> <p>The Lithium Metal Batteries used in BlackBerry Radar can pose risk of fire, explosion and severe burn hazard if mishandled or damaged. These batteries should never be placed in regular waste and must be recycled through appropriate e-waste or battery recycling channels. Ensure you dispose of your BlackBerry Radar device and its battery in accordance with the laws and regulations in your area. If you have an existing waste management partner, please consult with them regarding disposal, or visit BlackBerry.com/RadarSupport for more information.</p> <p>Only use BlackBerry battery BAT-63845-001 in the BlackBerry Radar R2 IS device. Refer to the BlackBerry Radar Battery Information Sheet for details on dimensions, weight, and Lithium content per battery. Safety Data Sheets can be provided upon request.</p>

Compliance information

Exposure to radio frequency signals

The device radio is a low-power radio transmitter and receiver. It is designed to comply with Federal Communications Commission (FCC) and Innovation, Science and Economic Development Canada (ISED), and The Council of the European Union guidelines and limits, as well as other relevant international guidelines regarding safety levels of radio frequency exposure for wireless devices. These guidelines were developed by independent scientific

experts, governments, and organizations including the Institute of Electrical and Electronics Engineers Standard (IEEE), National Council on Radiation Protection and Measurements (NCRP), and International Commission on Non-Ionizing Radiation Protection (ICNIRP).

FCC compliance statement (United States)

This device complies with Part 15 of the Federal Communications Commission (FCC) Rules under FCC ID: L6AITK100-1. 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.

CAUTION:

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

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

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.

Innovation, Science and Economic Development Canada certification

This device complies with Innovation, Science and Economic Development Canada (ISED) license-exempt RSS standard(s). Operation is subject to the following 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 RSS-247, RSS-102, RSS-GEN, RSS-251 and ANSI C63-10 under Certification Number 2503A-ITK1001.

Le présent appareil est conforme aux Innovation, Sciences et Développement économique Canada (ISED) 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 radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

L'appareil est conforme aux normes ISED RSS-247, RSS-102, RSS-GEN, RSS-251 et ANSI C63-10 sous le numéro d'agrément 2503A-ITK1001.

Radiation exposure statement:

This equipment complies with FCC + ISED radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with greater than 20 cm between the radiator and your body.

Déclaration d'exposition aux radiations:

Cet équipement est conforme aux limites d'exposition aux rayonnements FCC + ISED établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé à plus de 20 cm entre le radiateur et votre corps.

Class B compliance

This device complies with the Class B limits for radio noise emissions as set out in the interference-causing equipment standard entitled "Information Technology Equipment (ITE)--Limits and methods of measurement," ICES-003 of Innovation, Science and Economic Development Canada.

Additional regulatory conformance

Specific details about compliance to the standards and regulatory bodies for the device may be obtained from BlackBerry.

Legal notice

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