Operating in Canada: ISED Rules

In Canada, LoRa mesh networking in the 902-928 MHz band operates under Innovation, Science and Economic Development Canada (ISED) regulations, primarily RSS-247 (Digital Transmission Systems, Frequency Hopping Systems and Licence-Exempt LAN Devices) together with RSS-Gen.

Key Canadian Rules

- **License-exempt operation** - The 902-928 MHz band is license-exempt under RSS-247 for frequency-hopping and digitally-modulated devices meeting power limits
- **Maximum conducted power: 1 watt (30 dBm)** - Same as US FCC Part 15
- **Maximum EIRP** - 4 W e.i.r.p. for digitally modulated devices, effectively equivalent to FCC Part 15 limits - see RSS-247 section 5.4 for specific values and conditions
- **Hardware certification** - Devices must be certified under ISED (previously IC) marking. Most hardware certified for the US (FCC) market also carries ISED certification.

Canadian ISM Band Availability

The 902-928 MHz band is available across Canada for license-exempt operation, making it directly compatible with US equipment and networks. Canadian and US mesh operators using 915 MHz hardware can interoperate seamlessly near the border.

Interference Considerations

Canada shares the 902-928 MHz ISM band with various Part 15 equivalent users. The non-interference and no-protection rules apply equivalently: you must not cause harmful interference, and you have no protection from interference by other users.

Quebec/French Language Considerations

Canada's Official Languages Act applies only to federal institutions and certain federally regulated businesses - it does not cover hobbyist mesh groups or typical nonprofits publishing software documentation. Organizations doing business in Quebec should instead be aware of Quebec's Charter of the French Language. For individual hobbyist operation, no language requirements affect technical operation of mesh networks.

ARES Canada

In Canada, the Amateur Radio Emergency Service (ARES) is organized by Radio Amateurs of Canada (RAC); its volunteers operate on amateur frequencies under their individual ISED (formerly Industry Canada) Amateur Radio Operator Certificates, not under organization-held spectrum licenses. When MeshCore or Meshtastic is used on ISM frequencies (902-928 MHz), ARES volunteers operate under the same license-exempt rules as all other Part 15 equivalent operators - no additional authorization is required.

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