

EMC requirements for battery powered devices

The Australian Communications and Media Authority's (the ACMA's) electromagnetic compatibility (EMC) regulatory arrangement specifies requirements for the supply of a wide range of electrical and electronic devices.

Under these arrangements, the supplier in Australia (importer or Australian manufacturer) must ensure their products meet mandatory technical standards. Suppliers of devices covered by the EMC arrangement must also meet applicable record keeping requirements in respect of devices supplied to the market.

Certain devices must be labelled with the C-Tick regulatory compliance mark to illustrate compliance with the applicable standards.

Device risk levels

The Radiocommunications Labelling (Electromagnetic Compatibility) Amendment Notice 2009 (No.1) revised the definitions of 'Low Risk' and 'Medium Risk' devices.

The definition of 'High Risk' device has not changed and remains – A 'High Risk' device is a device described as "Group 2 ISM equipment" in AS/NZS CISPR 11:2004 (2nd Edition).

The new definitions are:

- > A low risk device is a device that is not a medium risk device or a high risk device.
- > A medium risk device is a device that is not a high risk device and contains 1 or more of the following:
 - > a switch mode power supply;
 - > a transistor switching circuit;
 - > a microprocessor;
 - > a commutator;
 - > a slip-ring motor;
 - > an electronic device operating in a switching or non-linear mode.

A device that is a battery-powered device is NOT a medium risk device unless the ACMA has declared the device to be a medium risk device.

This new definition of medium risk device means that a battery-powered device, if it is not a high risk device, is classed as a low risk device.

Low risk devices **must still comply with the applicable technical standard**, but are not required to be labelled.

Battery-powered device has a particular meaning. A **battery-powered device** is a device that is not capable of being connected to an external power supply.

A battery-powered device is intended to include any device where the battery is housed internally within the device. Examples include items such as battery operated toys, calculators and wrist watches.

A device that connects to a power source that is external to the device does not meet the definition of a battery-powered device. Examples of devices that are not battery-powered devices include:

- > USB devices (these are powered via the USB port)
- > portable MP3 players that connect to an external power source for charging
- > automotive devices (these connect to the car's battery which is an external power source)
- > inverters
- > Ethernet powered devices

A device where the battery is part of the device for normal operation, but removed from the device for charging would be classed as a battery-powered device. The charger used to charge the battery would need to be assessed separately.

More information

Suppliers may contact comply.label@acma.gov.au for more information.

ACMA has [fact sheets](#) on a range of topics.

Please note: this document is intended as a guide only and should not be relied on as legal advice or regarded as a substitute for legal advice in individual cases.

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