

EMC testing of broadband over power line equipment

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

While the ACMA is examining the necessity for regulation specific to broadband over power line (BPL) deployed networks, equipment used on those networks is already subject to requirements under the following instruments:

- > Telecommunications Labelling (Customer Equipment and Customer Cabling) Notice 2001
- > Radiocommunications Labelling (Electromagnetic Compatibility) Notice 2008.

Telecommunications labelling

BPL equipment which is telecommunications customer equipment and that feature ports capable of connection to a telecommunications network must be assessed against the requirements of the Telecommunications Labelling Notice. Schedule 1 to the notice specifies types of interface for which there are mandatory telecommunications standards.

For example: A BPL device with a connection port capable of supporting a standard telephone (that is, the port provides supply voltage and ring signals for a standard telephone) is customer equipment and is subject to the technical standards described in Category B31 of the schedule. This device must be labelled with the A-Tick compliance mark and supplier identification in accordance with the Telecommunications Labelling Notice.

Radiocommunications labelling

All BPL devices used in customer premises are information technology equipment and are subject to the Australian EMC regulatory requirements as specified in the Radiocommunications Labelling (Electromagnetic Compatibility) Notice 2008.

These devices must comply with the Class B limits of the most appropriate EMC standard which is CISPR 22, EN 55022 or AS/NZS CISPR 22.

Some confusion exists regarding EMC testing of BPL devices with some test houses conducting the 'conducted emissions tests' with the modulator in the device disabled or turned off. This is an incorrect practice and the devices must have this test conducted with the BPL signal turned on.

The BPL device must comply with the domestic or Class B limits of the standard

BPL devices that can only be used in external deployments on pole tops, within the network, or in commercial locations at least 10m from a broadcast receiver may be labelled if they comply with the Class A limits specified within the standard.

BPL devices that are not telecommunications customer equipment must be labelled with the C-Tick compliance mark and supplier identification. BPL devices that are subject to the telecommunications regulatory arrangement must be labelled with the A-Tick compliance mark and supplier identification.

More information

The ACMA booklet *Information for suppliers of electrical and electronic products in Australia and New Zealand* is available on the ACMA website.

For more information suppliers can also contact comply.label@acma.gov.au

The 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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