

SALE & USE OF POWERLINE COMMUNICATIONS (PLC) EQUIPMENT

1. Sale of PLC Equipment

- 1.1 To sell PLC equipment¹, suppliers need not obtain approval from IDA but must ensure that the PLC equipment will not cause interference to radio services (refer to the “IDA Reference Specification for PLC Equipment” for guidance).
- 1.2 For PLC access equipment, which will be marketed to PLC network and service providers, suppliers also need to check with the PLC network operators on network compatibility.
- 1.3 In addition, suppliers are advised to approach SPRING to register their PLC products under the Singapore Consumer Protection (Safety Requirements) Scheme.

2. Use of PLC Equipment

Consumers are advised to purchase PLC home networking devices with the Safety mark to ensure that the devices have passed the safety standards stipulated by SPRING Singapore. They should use electricians licensed by EMA if the connection of PLC devices requires electrical installation work.

3. Technical Guidelines

IDA has prepared a “Reference Specification for PLC Equipment” based on the FCC² Part 15 and CISPR³ 22. The Reference Specification is intended for providing guidelines on PLC equipment and installation to operators and suppliers, specifying parameters mainly to address the following technical aspects:

- (a) Control of interference to radio-communication users
 - Operating frequency band in 1.6 – 30 MHz
 - Capability to suppress frequencies reserved for critical users
 - Equipment compliance with the FCC Part 15 or CISPR 22 for EMC requirements
 - Installation emission within limits set in FCC Part 15
- (b) Control of interference to neighbouring PLC users
Frequency band blocking mechanism (e.g. blocking filter or ferrite choke)
- (c) Electrical safety to users
Compliance with SS⁴ 337 or IEC⁵ 60950

This Reference Specification, IDA RS PLC is available from the IDA website: <http://www.ida.gov.sg> under Policy & Regulation.

¹ Any equipment that transmits signal for communications or control over the power line is PLC equipment (e.g. PLC access equipment and PLC home networking devices).

² The Federal Communications Commission in USA

³ The International Special Committee on Radio Interference

⁴ Singapore Standards

⁵ The International Electrotechnical Commission