PD CLC/TR 50607-10:2015

BSI Standards Publication

Satellite signal distribution over a single coaxial cable

Part 10: Implementation guideline

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National foreword

This Published Document is the UK implementation of CLC/TR 50607-10:2015.

The UK participation in its preparation was entrusted by Technical Committee EPL/100, Audio, video and multimedia systems and equipment, to Subcommittee EPL/100/4, Cable distribution equipment and systems.

A list of organizations represented on this committee can be obtained on request to its secretary.

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Satellite signal distribution over a single coaxial cable - Part 10: Implementation guideline

Distribution de signaux satellites sur un seul câble coaxial - Partie 10: Lignes directrices de mise en œuvre

Verteilen von Satellitensignalen über ein Koaxialkabel - Teil 10: Anwendungsleitfaden

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European foreword

This document (CLC/TR 50607-10:2015) has been prepared by CLC/TC 209, “Cable networks for television signals, sound signals and interactive services”.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

Introduction

EN 50607 specifies the second generation of channel stacking systems for satellite reception. The second generation allows more reception possibilities by increasing the number of user bands and the number of satellite feeds.

This Technical Report provides implementation examples to assist manufacturers and installers of satellite distribution and satellite receiving equipment to implement EN 50607 in the most convenient way and to ease installation of products according to EN 50607.

1 Scope

This Technical Report describes a number of different satellite reception scenarios and how to use SCD2 here. In particular, Universal and Wideband LNB architectures for different SHF bands (Ku-, Ka- and C-Band) are taken into account.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 50607, *Satellite signal distribution over a single coaxial cable - Second generation*

3 Terms, definitions and abbreviations

3.1 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 50607 apply.

3.2 Abbreviations

For the purposes of this document, the abbreviations given in EN 50607 apply.

4 Standard applications

4.1 General note for all application examples

The following examples show block diagrams for one user band only. For more user bands, switch matrix and converter blocks can be multiplied accordingly.

Function blocks are simplified (no pre-selection filters etc.).

Data format is simplified (offset of 100 MHz in transmitted data is ignored).

Only analogue converters are shown, the examples can be adapted for dCSS solutions accordingly.

Basically, the examples describe applications with:

a) Universal LNB (see 4.2);

b) Multi-switch with feed by Quatro LNB (see 4.3);

c) LNB´s with wideband architecture (see 4.4.);

d) Multi-switch with wideband feed see (4.5);

e) Two satellite reception (see 4.6);

f) C-Band LNB´s (see 4.7);

g) Universal Ka Band LNB with dual wideband hardware (see 4.8);

h) Multi-switch with feed by LNB (dual wideband feed) in 4.9;

i) Ka Band LNB (ultra-wideband hardware) in 4.10.