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SERIES J: CABLE NETWORKS AND TRANSMISSION
OF TELEVISION, SOUND PROGRAMME AND OTHER
MULTIMEDIA SIGNALS

Interactive systems for digital television distribution
(DOCSIS third to fifth generations)

Fourth-generation transmission systems for interactive cable television services – IP cable modems

Recommendation ITU-T J.225

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Fourth-generation transmission systems for interactive cable television services – IP cable modems

Summary

Recommendation ITU-T J.225 defines the fourth generation of high-speed data-over-cable systems. The fourth-generation transmission systems introduce a number of new features that build upon what was present in previous Recommendations ITU-T J.112, ITU-T J.122, ITU-T J.222 and ITU-T J.223. This Recommendation includes key new features for the physical (PHY) layer and defines Full Duplex DOCSIS Mode of operation, including enhancements to the media access control (MAC) layer protocols as well as requirements for upper layer protocols (e.g., IP, DHCP, etc.). The fourth-generation cable modem specifications are incorporated fully in this Recommendation. Informative Supplement 10 to the ITU-T J series of Recommendations contains the correspondence between the DOCSIS versions and the ITU-T Recommendations revisions and generations.

NOTE – The structure and content of this Recommendation have been organized for ease of use through direct reference to the original source material, based on the recognition of CableLabs by ITU in accordance with Recommendation ITU-T A.5.¹

History

Edition	Recommendation	Approval	Study Group	Unique ID*
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Keywords

Data-over-cable service interface specification, DOCSIS.

¹ Recommendation ITU-T A.5 (2019), *Generic procedures for including references to documents of other organizations in ITU-T Recommendations*. See: <https://www.itu.int/en/ITU-T/extcoop/Pages/sdo.aspx>

* To access the Recommendation, type the URL <http://handle.itu.int/> in the address field of your web browser, followed by the Recommendation's unique ID. For example, <http://handle.itu.int/11.1002/1000/11830-en>.

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