

STANDARD

11519-3

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**Road vehicles — Low-speed serial data
communication —**

Part 3:

Vehicle area network (VAN)

*Véhicules routiers — Communication en série de données à basse
vitesse —*

Partie 3: Réseau local de véhicule (VAN)



Reference number
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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 11519-3 was prepared by Technical Committee ISO/TC 22, *Road vehicles*, Sub-Committee SC 3, *Electrical and electronic equipment*.

ISO 11519 consists of the following parts, under the general title *Road vehicles — Low-speed serial data communication*:

- *Part 1: General and definitions*
- *Part 2: Low-speed controller area network (CAN)*
- *Part 3: Vehicle area network (VAN)*
- *Part 4: Class B data communication network interface (J1850)*

Annexes A and B form an integral part of this part of ISO 11519.

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Road vehicles — Low-speed serial data communication —

Part 3: Vehicle area network (VAN)

1 Scope

This part of ISO 11519 specifies the data link layer and the physical layer of the Vehicle Area Network (VAN), communications network up to 125 kbit/s, for road vehicle application. The VAN is an access-method-oriented multimaster-multislave which allows optimized request/response management by special method of handling a remote transmission request (retaining access to the medium to allow insertion of a response).

This part of ISO 11519 defines the general architecture of the low-speed communication network up to 125 kbit/s and the content of the data link layer, and the physical layer for transmission between different types of electronic modules on board road vehicles.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 11519. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO 11519 are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO/TR 8509:1987, *Information processing systems — Open Systems Interconnection — Service conventions.*

ISO 8802-2:1989, *Information processing systems — Local area networks — Part 2: Logical link control.*

3 Definitions and abbreviations

3.1 Definitions

For the purposes of this part of ISO 11519, the following definitions apply.

3.1.1 acknowledgement field (ACK): Field used by a module concerned to indicate correct interpretation of the frame by a receiver.