

This is a preview of "ISO 11783-13:2022". [Click here to purchase the full version from the ANSI store.](#)

Third edition  
2022-05

---

---

# Tractors and machinery for agriculture and forestry — Serial control and communications data network —

## Part 13: File server

*Tracteurs et matériels agricoles et forestiers — Réseaux de  
commande et de communication de données en série —*

*Partie 13: Serveur de fichiers*



Reference number  
ISO 11783-13:2022(E)

© ISO 2022



**COPYRIGHT PROTECTED DOCUMENT**

© ISO 2022

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office  
CP 401 • Ch. de Blandonnet 8  
CH-1214 Vernier, Geneva  
Phone: +41 22 749 01 11  
Email: [copyright@iso.org](mailto:copyright@iso.org)  
Website: [www.iso.org](http://www.iso.org)

Published in Switzerland

This is a preview of "ISO 11783-13:2022". Click here to purchase the full version from the ANSI store.

## Contents

|  | Page      |
|--|-----------|
| <b>Foreword</b> .....  | <b>iv</b> |
| <b>Introduction</b> .....  | <b>v</b>  |
| <b>1 Scope</b> .....   | <b>1</b>  |
| <b>2 Normative references</b> .....                                    | <b>1</b>  |
| <b>3 Terms and definitions</b> .....                                   | <b>1</b>  |
| <b>4 Requirements</b> .....  | <b>2</b>  |
| 4.1 General message format.....  | 2         |
| 4.2 File data format.....  | 3         |
| 4.2.1 Data.....  | 3         |
| 4.2.2 Bit groups.....  | 3         |
| 4.2.3 Integer.....   | 3         |
| 4.2.4 Character string.....  | 3         |
| 4.3 Data transmission control.....                                     | 3         |
| 4.3.1 General.....   | 3         |
| 4.3.2 Strategy.....  | 3         |
| 4.3.3 Timeout.....   | 4         |
| 4.4 Date and time support.....   | 4         |
| 4.5 Multi-client support.....  | 4         |
| 4.6 File Handles.....  | 5         |
| 4.7 Volumes.....   | 5         |
| 4.8 Primary volume.....  | 6         |
| 4.9 Commands.....  | 7         |
| 4.10 Connection/Disconnection of a client.....                         | 7         |
| <b>Annex A (normative) Character set</b> .....                         | <b>9</b>  |
| <b>Annex B (normative) Parameter definitions</b> .....                 | <b>15</b> |
| <b>Annex C (normative) File server message definitions</b> .....       | <b>27</b> |
| <b>Annex D (informative) Common file system examples</b> .....         | <b>58</b> |
| <b>Annex E (informative) Why path names end with a backslash</b> ..... | <b>59</b> |
| <b>Bibliography</b> .....  | <b>60</b> |

## 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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 23, *Tractors and machinery for agriculture and forestry*, Subcommittee SC 19, *Agricultural electronics*.

This third edition cancels and replaces the second edition (ISO 11783-13:2011), which has been technically revised.

The main changes are as follows:

- removal of support for short, 8.3 format, path and file names;
- addition of support for Unicode characters in path and file names;
- addition of clarifications to improve the implementation and testability of the file server protocol.

A list of all parts in the ISO 11783 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

This is a preview of "ISO 11783-13:2022". [Click here to purchase the full version from the ANSI store.](#)

## Introduction

ISO 11783 specifies a communications system for agricultural equipment based on the ISO 11898-2 protocol. SAE J1939 documents<sup>1)</sup>, on which parts of ISO 11783 are based, were developed jointly for use in truck and bus applications and for construction and agriculture applications. Joint documents were completed to allow electronic units that meet the truck and bus SAE J1939 specifications to be used by agricultural and forestry equipment with minimal changes. General information on ISO 11783 can be found in this document.

The purpose of ISO 11783 is to provide an open, interconnected system for on-board electronic systems. It is intended to enable electronic control units (ECUs) to communicate with each other, providing a standardized system.

---

1) Society of Automotive Engineers, Warrendale, PA, USA.