

ISO 15784-2:2024-06 (E)

Intelligent transport systems - Data exchange involving roadside modules communication - Part 2: Centre to field device communications using Simple Network Management Protocol (SNMP)

Contents Page

- Foreword..... v
- Introduction..... vi
- 1 Scope..... 1
- 2 Normative references..... 2
- 3 Terms and definitions..... 2
- 4 Abbreviated terms..... 4
- 5 Conformance and Conventions..... 5
 - 5.1 ASN.1..... 5
 - 5.2 SNMP Terminology..... 5
 - 5.3 Format..... 5
 - 5.4 Conformance..... 5
- 6 Architecture..... 5
 - 6.1 ITS services..... 5
 - 6.2 Physical view..... 5
 - 6.3 Communications view..... 6
- 7 Requirements..... 7
 - 7.1 Overview..... 7
 - 7.2 Terminology and internal architecture..... 8
 - 7.3 Message Processing and Dispatching..... 8
 - 7.4 Applications..... 8
 - 7.4.1 Entity type..... 8
 - 7.4.2 Command generator..... 8
 - 7.4.3 Command responder..... 8
 - 7.4.4 Notification originator..... 8
 - 7.4.5 Notification receiver..... 9
 - 7.4.6 Proxy forwarder..... 9
 - 7.5 Security models..... 9
 - 7.5.1 User-based security model..... 9
 - 7.5.2 Transport security model..... 9
 - 7.6 View-based access control..... 10
 - 7.7 Protocol operations..... 10
 - 7.7.1 General..... 10
 - 7.7.2 Request ID variation..... 10
 - 7.8 Transport mappings..... 10
 - 7.8.1 Port numbers..... 10
 - 7.8.2 UDP over IPv4..... 10
 - 7.8.3 UDP over IPv6..... 10
 - 7.8.4 TCP over IPv4..... 11
 - 7.8.5 TCP over IPv6..... 11
 - 7.8.6 Secure transport..... 11
 - 7.9 Management information base (MIB)..... 11
 - 7.9.1 Agent MIBs..... 11
 - 7.9.2 Notification originator MIBs..... 12
 - 7.9.3 Proxy forwarder MIBs..... 12
 - 7.9.4 Other supported data..... 12
 - 7.10 Context engine ID discovery..... 12

8	Performance	12
8.1	Overview.....	12
8.2	Default response time.....	12
Annex A	(informative) Primer for SNMP	14
Annex B	(informative) Encoding examples	17
Bibliography	19