

# ISO 14223-1:2011-04 (E)

## Radiofrequency identification of animals - Advanced transponders - Part 1: Air interface

---

Contents	Page
Foreword .....	iv
Introduction .....	v
1 Scope .....	1
2 Normative references .....	1
3 Conformance .....	1
3.1 Transponder .....	1
3.2 Transceiver .....	1
4 Terms and definitions .....	2
5 Abbreviated terms .....	4
6 Symbols .....	4
7 General requirements .....	6
8 FDX-ADV transponder .....	6
8.1 FDX-ADV down-link description .....	6
8.2 FDX-ADV transponder -- Mode-switching protocol .....	7
8.3 Down-link communication signal interface -- Transceiver to transponder .....	8
8.4 Communication signal interface -- Transponder to transceiver .....	11
9 HDX-ADV transponder .....	12
9.1 Transponder charge and recharge times .....	12
9.2 HDX-ADV down-link description .....	13
9.3 HDX-ADV -- Mode switching protocol .....	14
9.4 Down-link communication signal interface -- Transceiver to HDX-ADV transponder .....	14
9.5 Communication signal interface -- Transponder to transceiver .....	16
10 General protocol timing specification .....	18
10.1 General considerations .....	18
10.2 FDX-ADV transponder .....	18
10.3 HDX-ADV transponder .....	20
Annex A (informative) Synchronisation of advanced transceivers .....	23
Annex B (informative) FDX-ADV and HDX-ADV down-link interfaces .....	25