

# ISO/IEC 15420:2009-12 (E)

## Information technology - Automatic identification and data capture techniques - EAN/UPC bar code symbology specification

---

<b>Contents</b>		<b>Page</b>
Foreword .....		iv
Introduction .....		v
1	Scope .....	1
2	Normative references .....	1
3	Terms and definitions .....	1
4	Requirements .....	3
4.1	Symbology characteristics .....	3
4.2	Symbol structure .....	3
4.2.1	Symbol types .....	3
4.2.2	Symbol encodation .....	3
4.2.3	Symbol formats .....	5
4.3	Dimensions and tolerances .....	14
4.3.1	Measurement basis .....	14
4.3.2	Width of narrow element (X) .....	15
4.3.3	Bar height .....	15
4.3.4	Quiet zone .....	15
4.3.5	Positioning of the add-on symbol .....	15
4.3.6	Element widths .....	15
4.3.7	Symbol width .....	16
4.3.8	Magnification factors .....	17
4.3.9	Dimensional Tolerances .....	17
4.4	Reference decode algorithm .....	17
4.5	Symbol quality .....	21
4.5.1	Test methodology .....	21
4.5.2	Decodability .....	22
4.5.3	Additional Criteria .....	22
4.6	Application-defined parameters .....	23
4.7	Human-readable interpretation .....	23
4.8	Transmitted data .....	23
4.9	Implementation guidelines .....	23
Annex A (normative) Additional features .....		24
Annex B (normative) Symbology identifier .....		26
Annex C (informative) Overview of the GS1 system .....		27
Annex D (informative) Illustration of number sets A, B and C and auxiliary patterns .....		28
Annex E (informative) Dimensioned drawings of the nominal size symbols .....		30
Annex F (informative) Traditional Dimensional Tolerances .....		35
Annex G (informative) Guidelines for reading and printing .....		37
Bibliography .....		39