

IMPROX MA

ImproX Micro Antenna Reader

INTRODUCTION

The **ImproX MA**, Micro Antenna Reader, is a compact Reader. The Antenna Reader includes a single tone Buzzer and a Status LED, their functions are application specific.

The MA is designed for exclusive use with an ImproX TT Twin Antenna Terminal in the ImproX IXP200, 300 and 400 Access Control Systems.

The Antenna Reader is intended for indoor or outdoor use. The electronic components are potted enhancing its resistance to tampering.

APPLICATIONS

- Access control Antenna Reader.



FEATURES

- The unit provides the following features:
- A single tone Buzzer.
- A single bi-coloured red/green Status LED.
- Read/Write tag capability for various tag types: Slim Tags (Read Only), Omega Tags (Read Only), WriTag 128 and WriTag 2048 (Read/Write).

SPECIFICATIONS

PHYSICAL SPECIFICATIONS		Dimensions	L = 88 mm (3.46"). W = 54 mm (2.13"). H = 25 mm (0.98").
	Mass		100 g (3.52 oz).
	Material		ABS plastic.
	Colour		Dark grey.
ENVIRONMENTAL SPECIFICATIONS		Temperature Operating	-25°C to +60°C (-13°F to +140°F).
		Temperature Storage	-40°C to +80°C (-40°F to +176°F).

Humidity Range	0 to 95% relative humidity at +40°C (+104°F) non-condensing.
EMC	EN 55024.
Electrostatic Discharge	EN 61000-4-2.
Electrical Fast Transients	EN 61000-4-4.
Surge Immunity	EN 61000-4-5.
Radiated Susceptibility	EN 61000-4-3.
Conducted Susceptibility	EN 61000-4-6.
Voltage Dips and Interruptions	EN 61000-4-11.
Dust and Splash Resistance	This unit is manufactured in accordance with a dust and splash environment similar to that of IP43.
Drop Endurance	2 m drop (in packaging).

NOTE :
The tests were performed with the ImproX MA Antenna Reader connected to an ImproX TT Twin Antenna Terminal.

OPERATOR INTERFACES

Buzzer	
Volume	Adjustable in four discrete steps (including off) via the communications protocol.
Tones	Single tone.
Status Indicators	
Bi-colour Red/Green LED	The functions are application specific (externally visible).

TAG READING RANGES

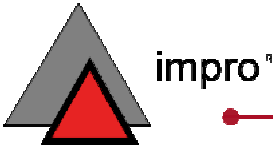
The range at which the Antenna Reader can read from or write to a tag is dependent on the type of tag and on the material on which the Antenna Reader is mounted. Typical ranges are shown in Table 1 below.

TAG TYPE (ImproX MA mounted on non-metallic surface)	TYPICAL RANGE (minimum)	
	(mm)	(in.)
ISO Credit Card Tag (Slim)	60	2.36
ISO Credit Card Tag (Omega)	60	2.36
Tear Drop Tag	40	1.58
Key Ring Tag	40	1.58
Pico Tag	20	0.78
ISO Credit Card WriTag 128	60	2.36
ISO Credit Card WriTag 2048	60	2.36
NOTE: <i>Mounting the ImproX MA on a metallic surface may decrease the read/write range slightly.</i>		

Table 1: Typical Read/Write Ranges
ACCESSORIES

The Antenna Reader is supplied with the following accessories:

- Wall mounting plugs and screws.



INTERNATIONAL STANDARDS

The ImproX MA Antenna Reader complies with requirements of the following international standards where applicable (tests applicable only when the Antenna Reader is connected to an ImproX TT Twin Antenna Terminal).

EN 55024	Limits and Methods of Measurement of Radio Disturbance Characteristics of Information Technology Equipment.
EN 61000-6-1	Generic Standards-Immunity.
EN 61000-6-3	Generic Standards-Emission.
EN 61000-4-1	Electromagnetic Compatibility (EMC). Part 4: Testing and Measurement Techniques. Section 1: Overview of Immunity Tests. Basic EMC Publication.
EN 61000-4-2	Electromagnetic Compatibility (EMC). Part 4: Testing and Measurement Techniques. Section 2: Electrostatic Discharge Immunity Test. Basic EMC Publication.
EN 61000-4-4	Electromagnetic Compatibility (EMC). Part 4: Testing and Measurement Techniques. Section 4: Electrical Fast Transients / Bursts. Basic EMC Publication.
EN 61000-4-3	Electromagnetic Compatibility (EMC). Part 4: Testing and Measurement Techniques. Section 3: Radiated, Radio-Frequency, Electromagnetic Field Immunity Test.
EN 61000-4-6	Conducted Susceptibility.
EN 61000-4-5	Surge Immunity.

APPROVALS

CE Approval: Approved.

TAMPER PROOFING

The Antenna Reader is potted, and is therefore tamper-resistant.

RELATED IMPRO PRODUCTS

The ImproX MA Antenna Reader is designed to be used for example in conjunction with the ImproX TT Twin Antenna Terminal.

ORDERING INFORMATION

The ImproX MA Antenna Reader can be ordered separately under the Impro code XTT902-1-0-GB-XX.