

# XT-1 ETC UHF Reader

DATA SHEET

Electronic Toll Collection.

## KEY FEATURES

- ▶ RAIN reader optimized for road toll applications
- ▶ Advanced algorithm based multi-lane features
- ▶ Easy to install and configure
- ▶ Robust and weatherproof design
- ▶ Extremely reliable operation

## Cost effective installation

The XT-1 ETC can be integrated into a road toll system with a minimum of installation and configuration. The reader will typically use Ethernet for integration. As an alternative also RS-232 and RS-485 interfaces are available. A built in Ethernet switch makes it easy to connect multiple readers for an efficient ETC architecture.

The XT-1 ETC is designed to withstand extreme weather conditions, temperatures, humidity and vibration, while providing optimal performance.

## RAIN compliant

The TagMaster XT-1 ETC is fully compliant with RAIN. The XT-1 ETC includes TagMaster's SecureMarkID ID-Tag format, which is developed to ensure that each UHF ID-tag has a unique identity which is difficult to duplicate. The XT-1 ETC combined with our SecureMarkID ID-Tags provides a higher level of security.

## PART NO. INFORMATION

XT-1 ETC UHF reader, in	153710
External 30/60 XT eu Antenna	163830
External 40/40 XT eu Antenna	163840
Universal Mounting Kit (optional)	193600
Antenna Cable 1.4m	196014

# TagMaster



## A technical innovation

The XT-1 ETC reader is designed and optimized for Electronic Toll Collection (ETC). Using unique design innovations and advancements in RFID technology, the XT-1 ETC redefines the world of ETC readers, eliminating cost barriers to address large-scale opportunities. With its high-speed performance and extended read range, the XT-1 ETC is ideally suited for road tolling systems, eliminating the manual operation associated with current systems, and enabling system operators to identify vehicles with appropriate authorizations from a distance, while the vehicle is in motion. This powerful UHF reader features best in-class air interface performance while the advanced software-based architecture provides a rich application platform that addresses the needs of global deployments, ensuring that features and capabilities can be added as RFID technology continues to evolve. The XT-1 ETC has advanced features for handling the multi-lane environment of an ETC installation. By combining antenna design with complex software algorithms, the reader will only identify tags of vehicles in the lane the reader is assigned to. The reader is connect to one external antenna which is selected based on the application requirements in order get optimized system performance.

The unique DNA of TagMaster products is characterized by long read range, long product life time, extremely high reliability and low cost of ownership. Its weatherproof design with IP66 rating ensures that the reader is the excellent choice for outdoor use.

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## TECHNICAL INFORMATION

<b>Operating frequencies</b>	XT-1 ETC UHF reader, in 865.0–867.0 MHz, India
<b>Read range</b>	Up to 15 meters (50 ft) with TagMaster Windshield tag depending on vehicle type and installation conditions
<b>Dimensions</b>	300 x 300 x 60 mm /(11.8x11x2,4 in)
<b>Weight</b>	2,3 kg (5.1 lbs)
<b>Protection</b>	IP66
<b>Operating temperature</b>	-40°C (-40°F) to +60°C (+140°F)
<b>Housing</b>	Aluminum housing UL94 certified plastic XENOY™ cover
<b>Power supply</b>	12–24 VDC supply
<b>Power consumption</b>	10 W (max 12 W)
<b>Output power</b>	EU: 2 W (e.r.p), US: 4 W (e.i.r.p), IN: 2 W (e.r.p)
<b>Input</b>	3 isolated inputs
<b>Output</b>	3 isolated outputs shared with Wiegand/Magstripe
<b>Relay</b>	1 relay output, 60 VDC, 2 A
<b>Interfaces</b>	RS232, RS485, Wiegand/Magstripe 2 pcs Ethernet and USB service interface
<b>Certificates</b>	CE Certificate according to directive 2014/53/EU (RED)
<b>Standards</b>	RAIN (EPC Gen2/ISO 18000-63)
<b>LED indicator</b>	Red/Green/Yellow
<b>Communication protocols</b>	TAGP, OSDP and various OEM protocols. More information in TagMaster manuals
<b>Encrypted air interface</b>	According to RAIN
<b>EMC</b>	EN 301489-1, EN 301489-3
<b>Safety</b>	EN 60950-1, EN 60950-22
<b>Manuals and documentation</b>	XT Series Reader Manual

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