
RFID TAG

User's Manual

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Introduction

Of all the technologies available for automatic identification systems, RF-ID offers the most user-friendly, high speed and reliable operation. Radio Frequency Identification (RFID) technology uses the radio waves to communicate between the Transmitter (Tag), The RF-ID technology used in this controller can offer read range of up to 200 feet as per the requirement and substantial hardware, can read multiple tags simultaneously.

RFID is the genuine wireless access technology and is growing leaps and bounds in Gate Entry, Tracking Asset Monitoring Applications through PDA. This RFID controller is designed to minimize these and provide an integrated, factory-tested module that can allow for simple installation and easy commissioning of complex systems. It includes XP/IP control panel with a high-speed processor, TCP/IP connectivity, memory capacity for 20,000 tags and 3000 transactions and many other critical features. In addition to this universal control panel, the RFID controller includes the RFID reader, a directional antenna that minimizes reading tags that are not in the specified coverage zone, an interlock sensor to minimize random reads and interference, 3 calibration LED's for field testing the system and power supply/battery backup circuits.

The RFID controller is designed with a metal back and a fiberglass front to provide optimum RF operation and comes with a universal mounting bracket that will fit any wall, pole or ceiling installation. It is designed for use in most indoor or outdoor application. It is available in several configurations for Master or Master/Slave operations in gate control systems and can also be used on doors for tracing elderly patients or in ceiling mount applications in warehouses, dock doors and hangers.

RFID CC TAG Technical Specification

Specification,	
Product Code	262-RFI-CSVAN
Environmental Operational temperature	10° C to +60° C
Storage temperature	-20° C to +70° C
Humidity	5% to 90% (non condensing)
Physical	
Size	86mm x 54mm x 5mm (Slimline Enclosure)
Weight	15 grams
Color	Grey (Clariant 04-600 2%)
Type of material	PVC (ultrasonically sealed) IP 65
RF Specifications	
Tx Frequency	433.92Mhz
ERP	< 300µW (72 dB µV)
Typical Transmission Range	8 Meters (24 feet)
Power Output	-14 dBm. 72 db µV. 4300
Modulation	ASK
Bandwidth	1 MHz
Stability	Saw Stabilized
Electrical Specifications	
Power	Internally powered Lithium Battery 3V, 1000 mAH
Certification:	
<p>This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:</p> <ul style="list-style-type: none"> (1) This device may not cause harmful interface, and (2) This device must accept any interference received, including interference that may cause undesired operation. <p>Changes or modifications not expressly approved by AMTEL could void the user's authority to operate the equipment.</p> <p>The following standards applied in accordance with Article 5 of the directive.</p> <p>1999/5/EC:</p> <p>EN 300 220-1 V1.2.1 (1997-11)</p> <p>ETS 300 683 (1997-03).</p>	
Summary of tests:	
<p>Effective radiated power 25MHz-4GHz</p> <p>Range of modulation bandwidth for wideband equipment.</p> <p>Frequency stability under low voltage conditions</p>	
EN55022	Radiated emissions 30MHz – 1GHz
EN61000	Radiated immunity 80MHz – 1GHz, excl 433.92MHz..20MHz
EN61000	Electrostatic discharge
RTCA/DO-160C sec21 catZ	Aircraft safety specification

Installation of RFID TAG (MM, CC, Binder & Pouch)

The system shall use Active RFID Tags that can be read from long or short distances. Two different types of tags are provided to meet the varying, tracking and assessment as per the applications requirement whether Man or Machine. Following are essential steps to be taken at the time of installation.

1. Before installing the TAG check whether Battery connection is okay or not.
 2. Check the TAG condition it is not broken or open.
 3. Check that if TAG is working then Reader LED blink at the time of shaking the TAG.
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1. **CC TAGS:** Hard-Shelled tags for normal windshield mounting: These are credit card sized tags ready for mounting with double sided tape or Velcro-spots under the rear-view mirror. They maybe adequate for most vehicles.
 2. **MM TAGS:** Hard-Shelled tags for mounting in cases where the windshield has embedded metal elements in it: These are slightly larger than the CC sized tags but are designed to work on metal surfaces (like license plates) and on metallized windshields in some expensive vehicles. They will be located in the same area, under the rearview mirror of the vehicle.
 3. **BINDER TAGS:** Binder Tags conventionally hard-shelled RFID tags can be affixed to selected document binders and holders as per the Pre-planned and diagram.
 4. **VISITOR TAGS:** This access card shall be placed in a pouch that has an RFID tag embedded inside it. As the visitor moves along throughout the facility, RFID readers located in the ceiling for Asset Tracking, shall read the tag, identify the location of the visitor, and be capable of generating an alert message if the visitor is found to be in any unauthorized area.

HELP AND TECHNICAL SUPPORT

Incase of any problem in the Panel Operation please contact the AMTEL Technical Support Cell at:

Email: sales@amtel-security.com

Fax: 305-470-2683

Phone: 1-800-22AMTEL (800-222-6835)

305-591-8200 Extn 855

Hours: 08:00 to 17:00

Monday - Friday

Please provide the following information for availing Technical Support:

Warranty Period.

Product Name

Date of Purchase & Serial No.

Dealers Name & Address with Zoning Code.

Panel Type

Panel Firmware/Software Version

Operation System

Computer Configuration

Setup of Security System and its applications.

System Setup (LAN/DSL/MODEM)

Panel IP with Server IP

Errors you are getting on the Panel or Computer with simple description or as per mentioned Error Code in Troubleshooting/Service Manual.