

433MHz Active RFID TAG USER MANUAL

Asiana IDT AI-TA-3A Air Cargo Pallet and Container TAG

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ASIANA IDT

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1. Features

- * Tags can communicate data with only designated interrogators
- * Tags are attached to ULD pallets or containers
- * Tags can monitor the cargoes in transit and storage in real time.
- * Many tags can be monitored simultaneously by one reader
- * Communication range can be up to 7 meters
- * Tag's battery life is typically 5 years.

2. Description

Figure 1 Front view



Figure 2 Back view



Figure 3 Side view



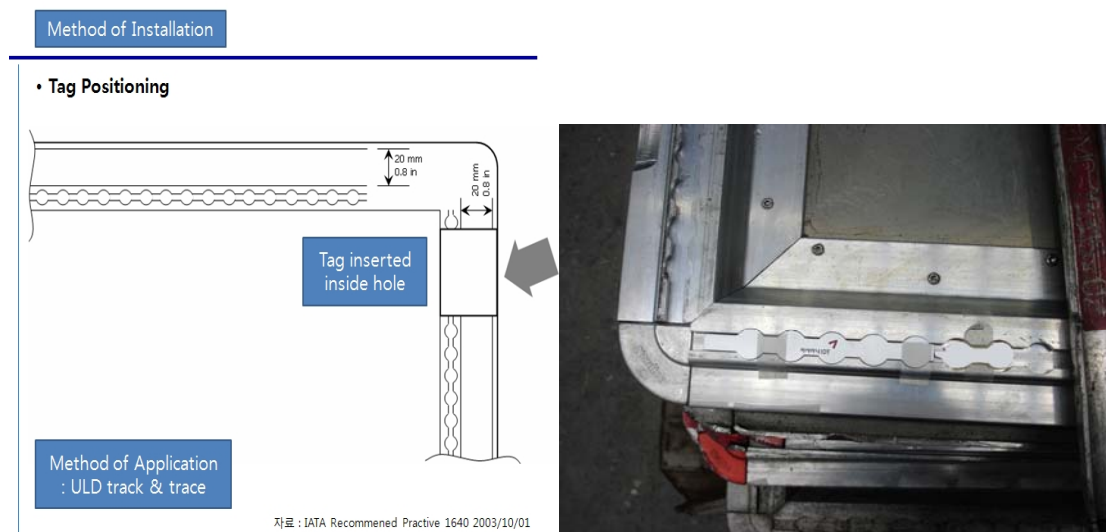
3. Specifications

	Unit	Items	Specification	Note
UHF (TRx)	MHz	Center frequency	433.92	
	ppm	Frequency stability	±20	
	kbps	Data rate	27.7	Manchester
	kHz	Bandwidth	200	
	dBm	Sensitivity	-95dBm	
	dBm	Output power	5.6 Max	EIRP
	-	Modulation	FSK	
	kHz	Frequency deviation	+/- 50	
	dB	Dynamic range	Over 80	
LF/ VLF (Rx)	-	Wake-up signal	VLF(19 kHz)	
	kbps	Data rate	2.731	
	-	Modulation	ASK	
	dB	Dynamic range	60	
	mV	Sensitivity	1.0 min.	
Environment Specification	°C	Operating temperature	-40 ~ +80	
	°C	Storage temperature	-40 ~ +85	
	-	Shock	30g for 11 ms, half-sine pulse	
	-	Random vibration	2hour, All axes 3g	

	%	Humidity	95%	
	-	Salt water	Over 1m	
	-	Dust, sand		
	V/m	Electromagnetic	50V/m(peak) 60sec	
	m	Drop shock	3.3	
Battery	V	Operating voltage	2.7~3.6V	
	-	Battery life	Over 5 years	10op./day
Mechanical	mm	Size	141.6 x 19.5 x 7.5	
	g	Weight	30	

4. Tag Placement

We recommend that the AI-TA-3A tags should be inside of ULDs (Air Freight Containers) Pallet inserted inside a hole.(ULD figure on this page)



< ULDs(Air Freight Containers) Pallet Figure >

5. Operation Area

AI-TA-3A tags should be only operated inside the Air Cargo Terminals.

It should be used on the commercial ULDs Pallets or Containers.

To prevent interference to Federal Government radar systems, operation is not permitted within 40 kilometers of the following locations:

DoD Radar Site	Latitude	Longitude
Beale Air Force Base	39°08'10" N	121°21'04" W
Cape Cod Air Force Station	41°45'07" N	070°32'17" W
Clear Air Force Station	64°55'16" N	143°05'02" W
Cavalier Air Force Station	48°43'12" N	097°54'00" W
Eglin Air Force Base	30°43'12" N	086°12'36" W

Warning : Changes or modifications not expressly approved by AsianaIDT could void the user's authority to operate the equipment.

Model : 433MHz Active Tag AI-TA-3A

FCC ID : VDZAI-TA-3A

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions. 1) The device may not cause harmful interference and 2) this device must accept any interference received, including interference that may cause undesired operation.

Notification : The user of the device shall be responsible for submitting updated information in the event the operating location or other information changes after the initial registration. The information provided by the user to the Commission shall include the name, address, telephone number and e-mail address of the user, the address and geographic coordinates of the operating location, and the FCC identification number of the device. The material shall be submitted to the following address:

Experimental Licensing Branch, OET
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

ATTN: RFID Registration