



## Model F1004-H3 FR4 RFID Tag

## Specifications & Data Sheet

FR4 Tags are specifically designed to perform better when mounted on metal and can be subsurface metal mounted as well with some minimal free air (normally filled with epoxy) around its perimeter. FR4 Tags are also capable of surviving high temperature processes of up to 200°C (392°F) indefinitely and beyond dependent upon their time of exposure.



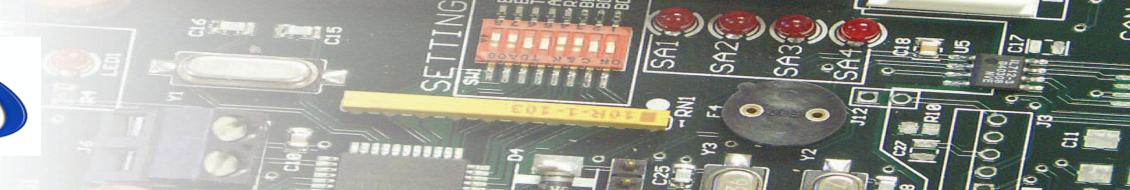
Model Number	Part Number	Description	Read Range (on metal)
F1004-H3	807-0001-F1004-H3	Model F1004-H3 FR4 UHF RFID Tag, Metal Mount, Alien Higgs3 chip	A99H Antenna – 4.5' A55C Antenna – 9" A64C Antenna – 16"

Mechanical:	Measurements:	10x4x2mm	.39"x.16"x.8"
	Material:	FR4	Epoxy Top
Certifications:	Weight:	0 ounces	Less than a gram
	RoHS III	REACH	CE
	FCC Part 15 & ETSI	ATEX compliant, SIL2	Free of BBP, DEHP, DBP, DIBP

Alien Higgs 3: RF:	TID – 64 bits	UID/EPC – 96-480 bits	512 bits
	Standard:	EPC Class1 Gen2	ISO 18000-6C
	Frequency:	902 – 928 MHz (North America)	860 – 870 MHz (EU, Japan)
	Power:	Passive, no Battery	Powered by Reader RF Signal
	Chip Options (page 2):	TID – 32 to 208 bits	EPC – 0 to 496 bits
			User – 0 to 61,400 bits

Environmental:	Storage Temp:	-40°F to +392°F	-40°C to +200°C
	Temp, Operating:	-40°F to +185°F	-40°C to +85°C
	Life:	40 Year Shelf Life	100k Writes
	Ingress Protection:	IP68	





### Available UHF Memory Chips:

	TID (ROM)	UID (EPC)	User Memory
Alien	64 bits	96 to 480 bits	512 bits
	64 bits	128 bits	128 bits
	48 bits	96-128 bits	128 bits
	48 bits	496 bits	688 bits
EM	TID (ROM)	UID (EPC)	User Memory
	64 bits	0 bits	0 bits
	64 bits	96 bits	0 bits
	32 bits	208 bits	0 bits
	64 bits	96 bits	720 bits
	48 bits	352 bits	3072 bits
	96 bits	64-160 bits	0 bits
	96 bits	Up to 480 bits	Up to 2048 bits less EPC
Fujitsu (FRAM)	TID (ROM)	UID (EPC)	User Memory
	208 bits	480 bits	61,400 bits
	208 bits	480 bits	61,400 bits
	176 bits	160 bits	0 bits
Impinj	TID (ROM)	UID (EPC)	User Memory
	96 bits	Up to 128 bits	32 bits
	96 bits	Up to 496 bits	128 bits
	96 bits	Up to 128 bits	512 bits
	96 bits	Up to 256 bits	480 bits
	96 bits	Up to 128 bits	8,192 bits
	96 bits	Up to 128 bits	Up to 64 bits
	96 bits	96 bits	0 bits
	96 bits	96 bits	0 bits
	96 bits	Up to 128 bits	32 bits
	96 bits	128 bits	32 bits
	96 bits	128 bits	0 bits
	96 bits	96 bits	32 bits
NXP	TID (ROM)	UID (EPC)	User Memory
	48 bits	128 bits	0 bits
	48 bits	128 bits	32 bits
	48 bits	448 bits	1024 bits
	48 bits	448 bits	2048 bits
	96 bits	128 bits	0 bits
	96 bits	96 bits	32 bits
	96 bits	96 bits	0 bits
	64 bits	128 bits	0 bits
	96 bits	256 bits	512 bits
	96 bits	Up to 448 bits	Up to 640 bits
	64 bits	240 bits	512 bits
	64 bits	240 bits	0 bits
	64 bits	0 bits	1680 bits

