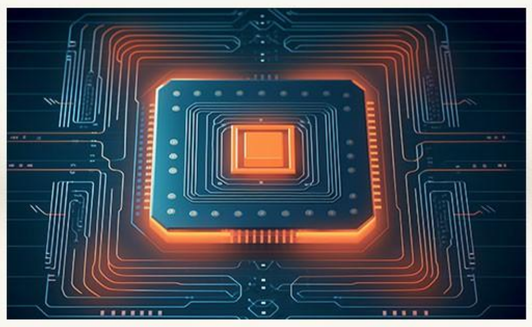
RFID Based IT Assets Management Solution

Solution Summary

RFID-based Asset Management System is a modern solution that allows organizations to easily track and manage their assets using radio frequency identification (RFID) technology. This system enables organizations to identify and locate assets quickly and accurately, improving efficiency and reducing losses.



IT asset management is a critical process in any organization to ensure proper utilization, maintenance, and security of IT resources. Manual tracking of IT assets can be time-consuming and prone to errors, making it necessary to adopt automated systems based on cutting-edge technologies like RFID.

RFID technology enables contactless identification and tracking of IT assets using tags that store unique identification information. The tags can be scanned using RFID readers placed at strategic locations within the organization's premises, allowing for real-time monitoring of assets as they move in and out of various locations.

System Architecture

2.4G reader MR7902 needs to be installed in each area or room for tag identification. Such as offices, laboratories, production workshops, computer rooms, etc. A 2.4G active tag must be attached to each asset.Production line equipment like Mounter; Laboratory equipment like OLT/ Optical Module, Network Analyzer; Server room like Server, PC; Medical Instruments etc.

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System Benefits

01 Comprehensive inventory

Real-time monitoring of all IT assets, in-cluding their location, status, and usage.

02 Reduced manual labor

Automation of IT asset management tasks reduces the need for manual tracking and inventory-taking.

03 Improved security

RFID technology enhances the security of IT assets by enabling real-time detection of unauthorized access or movement.

04 Increased accuracy

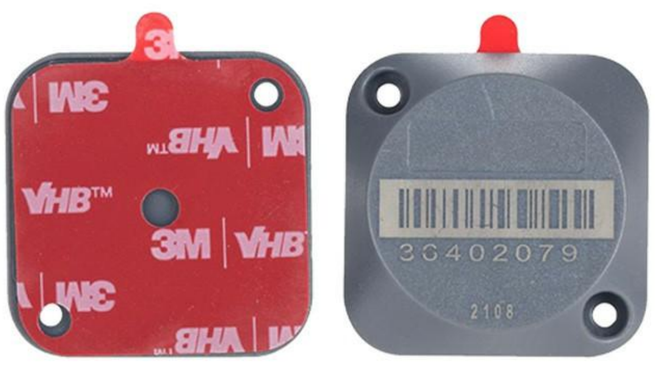
Eliminates human error associated with manual data entry and tracking.

Main Device

MR7902
2.4G RFID Reader

Model	MR7902
Material	ABS, high temperature resistant
Dimension	ϕ168*51.5mm
Way to install	wall-mounted, ceiling fixed
Net weight	0.3kg
Gain	3.5dBi
Reading range	200m MAX (based on tag type)
Signal modulation mode	GFSK
Traffic rate	1Mbit/s
Working frequency	2440MHz
MAX receive sensitivity	-90dbm
Input voltage	9-12V
Power consumption	300mA
Power adaptor	12V 2A
Color	White
Protocol	MarktraceRFID protocol
Transfer method	4G and TCP/IP
4G capabilities	Based on country
Operating temperature	-20°C~60°C
Storage temperature	-40°C~85°C
Certifications	FCC and CE

MR3837C
2.4G RFID Tag



Model No	MR3837C
Operation frequency	2402-2483MHz
Type	Beacon Type
Signal modulation	GFSK
Communication speed	1Mbit/s
Inductive Mode	Initiative Transmit, Transmit Every 1s
Output power	7dbm
Material	ABS, Heat Resistant
Dimension	40MM*40MM*10.8MM
Battery	Battery Life Up to 3 years
IP Grade	IP67
Installation	Fixed installation, hidden installation, screw
Color	Gray
Weight	14g
Unique ID	4 bytes Data in HEX, Lester Marking
Battery model	CR2450
Battery capacity	550mAh/3V
Operating temperature	-20°C~+45°C
Storage temperature	-30°C~+65°C
Operating humidity	10%～80%
Storage humidity	10%～95%

HZ801
2.4G RFID Tag

Model No	HZ801
Type	Beacon type, RF power 4dBm
Inductive Mode	Initiative transmit, transmit every 10 second
Material	ABS, heat resistant ,Black Color
Dimension	44.5*19*9.5mm
Battery	Battery life 5 years (signal time interval is 10s)
IP Grade	IP54
Signal Modulation Mode	GFSK
Communication Speed	1Mbit/s
Operating Frequency	2.44GHz
Average Current	<3.5uA
Battery model	CR1632
Operating Temp	-20°C~+60°C
Storage Temp	-40°C~80°C

MR3848
2.4G RFID Tag

Model No	MR3848
Type	Beacon type, MAX RF power 0dBm
Inductive Mode	Initiative transmit, transmit every 3 second
Material	ABS, heat resistant ,Black Color
Dimension	42*18.2*7.3mm (without 3M) 3M layer thickness is 1.55mm
Battery	Battery life 3 years (signal time interval is 3s)
IP Grade	IP54
Signal Modulation Mode	GFSK
Communication Speed	1Mbit/s
Operating Frequency	2.44GHz
Quiescent Current	<3uA
Average Current	<10uA
Battery model	CR1632
Operating Temp	-20°C~+45°C
Storage Temp	-30°C~65°C
Certifications	CE & FCC

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