A.I. HardWare

AI-RF-FX-CL02 Integrated UHF RFID Reader

Overview

High performance integrated UHF RFID Reader based on Impinj R2000 chip, supporting ISO18000-6B/6C protocol. It's long rang RFID reading, fast identification, excellent multi-tag reading, strong Anti-collision, IP66 weatherproof, win global clients great feedback.

APPLICATIONS

Parking Lot Management
Warehouse Out/In Storage
Security Entrance Access Control
IT Asset Inventory Management
Intelligent Traffic Control System

POWERFUL

Impinj R2000 chip, double power amplifier circuit
Linux OS system, ARM9 CPU, 24hrs X 365days working
Support off-line working, 128M RAM and 256M ROM

LONG RANGE

High RFID performance, max 15m distance
Inner 9dBi antenna, 1 other antenna extensible
Large multiple tags reading, 400 times/second

HIGH PROTECTION

Water proof and anti-dust, IP66 grade
Rugged housing design, for outdoor application

INTELLIGENT

RS-232, RS-485,Wiegand, RJ45, I/O interfaces
I/O interfaces: 2 optocoupler input/ 2 relay output

Specifications

System	
Operation System:	Linux 2.6
CPU:	ARM9, 400MHz
Memory Capacity:	DDR SDRAM :128M; ROM: 256M
Physical	
Size:	290mm×290mm×115mm
Weight:	2.5Kgs
Housing Material:	Aluminum + PC
Power supply:	DC (9V-30V) /2A(60W)
Protection level:	IP66
UHF RFID	
Protocol:	ISO/IEC18000-6B,6C / EPC C1Gen2
Frequency:	USA:902 MHz-928MHz (FCC part 15) EU:865-868MHz (ETSI EN 302208) CHN:920-925MHz(CMII) GB: 840MHz~845MHz
Output Power:	(25W) 0dBm~33dBm(±1dBm) adjustable
Power adjustment:	1dBm step-by-step
Channel bandwidth:	＜200KHz
Frequency stability	≤±10ppm
Interface:	RS-232, RS-485,Wiegand, RJ45, I/O, RF antenna port
Work Mode:	Fixed/hop frequency optional
Communication speed	10m/100m self-adaptable
Reading speed	>400times/S
I/O interface	2 optocoupler input/ 2 relay output (drive capability: DC 30V/2A, AC 125V/0.75A)
Anti-collision	Support multi-tag reading, intensive reading
Software	Support RSSI ,antenna detection, online update, data filtering
Built-in Antenna:	Circular 9dBi
VSWR	≤1.4：1
External antenna:	6dBi/9dBi/12dBi optional
Reading Distance:	0-15m (depending on environment)
Writing Distance:	0-8m (depending on environment)
Operational Environment	
Working Temperature:	-30 - +70°C
Storage Temperature:	-40 - +85°C
Atmospheric Pressure:	86kPa~108kPa
Relative Humidity:	10%-95% RH no condensing