

RFID READER (IDR-4)

RFID READER (IDR-4)
FOR ELECTRONIC TOLLING SYSTEM
BASED ON ISO18000-6C

A13-017787R0



RFID READER (IDR-4)

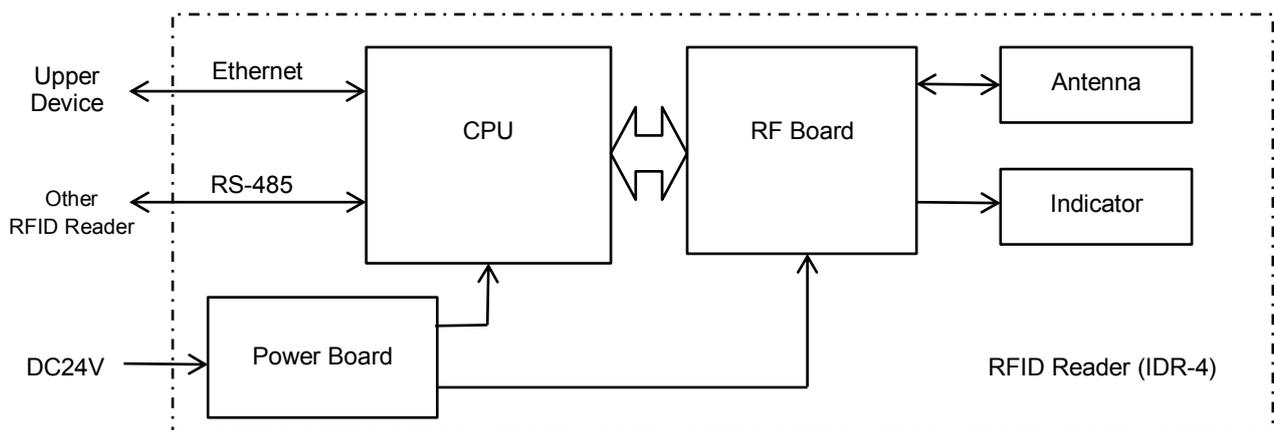
Feature

All-in-one type, UHF band, compact and road dedicated design, RFID Reader (IDR-4) is the best product for Electronic Toll Collection and ITS.

- Compact
- All-in-one type (Controller-less)
- Based on ISO 18000-6C global standard.
- Based on EPC Global Class1 gen2 standard
- Up to 180 km / h vehicle speed
- No need to handle thick and hard coaxial cable
- Connection cables are LAN and power supply only
- SDK and sample programs are included for rapid development

Overview of RFID Reader

Overview of RFID Reader is as below.



Overview of RFID Reader

Outline of RFID Reader



Outline of RFID Reader

RFID READER (IDR-4)
Specification
RFID Reader

Item	Specification	Remark
CPU	ARM processor	
Communication protocol	ISO/IEC 18000-6C EPC global Class1 Gen2	
Communication frequency	860 – 960 MHz	
Transmission power	2W ERP or less	
Communication range	6 to 8 m approx.	5m height
Size of outline	210(W) x 210(D) x 130(H) mm	Without attachment
Weight	1.5 kg or less	Without attachment
Power	DC24V +-10%	
Operating temperature	-20 to +55 degree	
Operating humidity	95%RH or less	
Indicator	Power-on, Communication	
External interface	Ethernet x 1 (10/100BASE-TX), RS-485 x 1	
Regulatory	Compliant to Digital Device under MS 300 220-1 and ETSI EN 300 220-1	
Communication speed	Down Link : 12.5 to 250 kbps Up Link : 40 to 640 kbps	



RFID READER (IDR-4)

Packaged software

Maintenance tool

The configuration of RFID Reader such as the network configuration, the radio wave setting can be changed by the Maintenance tool.

The operating environment of Maintenance tool is as below.

Operating environment of Maintenance tool

No.	Item	Operating Environment
1	OS	Windows 7
2	Condition	Ethernet port is required

Software Development Kit

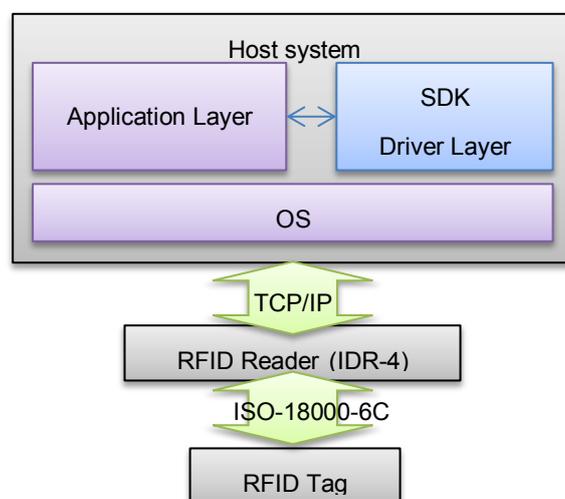
The Software Development Kit (SDK) is provided as the driver of the RFID Reader.

The communication protocols between Host system and RFID Reader are included in this SDK.

The operating environment of SDK is as below.

Operating environment of SDK

No.	Language	OS	bit	Compiler
1	Java	Windows	32bit	jdk1.5.0
2				jdk1.6.0_45
3			64bit	jdk1.8.0_66
4		Linux	32bit	jdk1.6.0_45
5			64bit	jdk1.8.0_66
6	C#	Windows	ANY	Visual Studio 2012



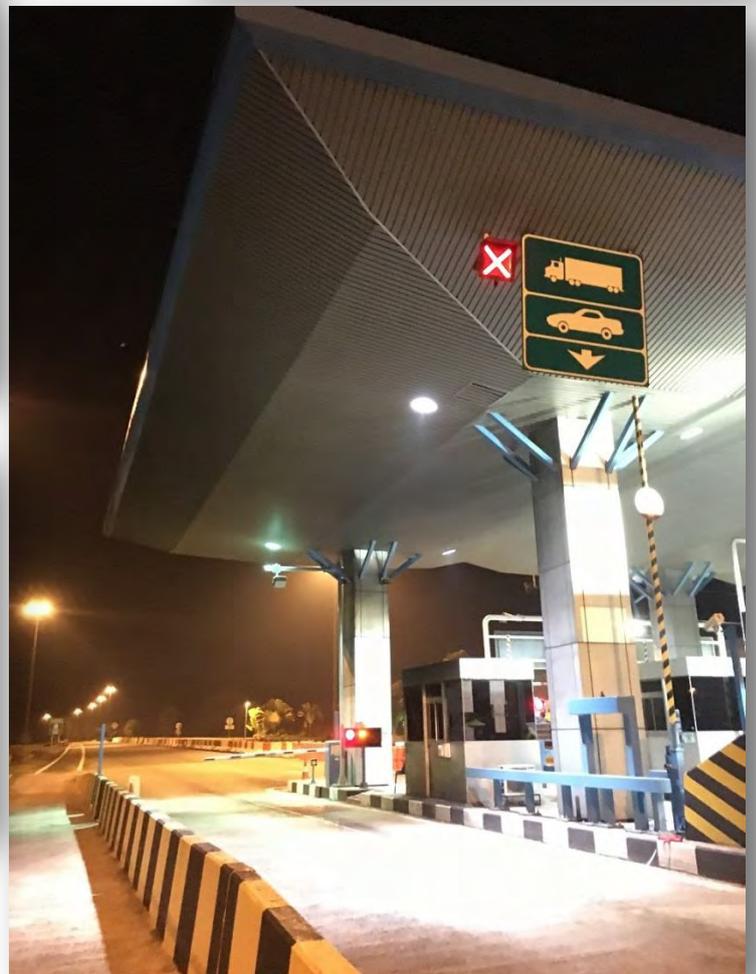
Block diagram of SDK

RFID READER (IDR-4)

RFID Reader Example of installation



Multi Lane Free Flow System POC



Single Lane ETC System POC