Operation Manual

RFID Reader "IDE-BRICK-LA2-ETH"

REVISION 1.0, 2016-02-04

M/N : 10096-1
A/N : 10096-107

Introduction

The "10096-107" Reader/Writer is a Desktop contactless smart card/tag reader and writer. It supports LEGIC RF standards, ISO 14443A/B, ISO 15693, FeliCa tags. The reader provides 13.56 MHz inductive interface to supply power in order to exchange data with the MIFARE/ISO, LEGIC compliant cards and interfacing with the host PC via Ethernet for data exchange.

Based on BALTECH's core technology it provides support of the latest smartcard technologies, encryption and security features.

Mounting and Connection

The reader generates a magnetic field at 13.56MHz which could be influenced by any electrically conductive material close to the device. To ensure good performances and functionalities in terms of read range and reliability a minimum distance of 10cm from such materials is required. Mounting the unit directly to metal would result in a severe reduction of read range down to zero functionality. Care should be taken when testing the device after mounting at a problematic environment: Read ranges and performance vary from card to card and very much from card to tag or key-fob.

When mounting multiple readers, the distance between readers should be minimum 0.5 m in order to avoid degradation of performance due to interference.

Operation

Whenever the device is connected to a proper power supply, it will switch on the internal antenna and periodically scan for a card. Once a card has been detected, the card number is read, the data converted and sent to the host system through the Ethernet Interface. To enable the device to read cards, tags and key-fobs successfully, they should be placed centred above the reader.

Technical Features

Parameters		Descriptions
RF-Characteristics	Operated Frequencies	13.56MHz
	Data transmission modulation reader to card:	ASK
	Data transmission modulation card to reader:	AM/Load modulation
Interfaces	Host	Ethernet
	Contactless	Supported standards: LEGIC, ISO 14443A/B, ISO 15693, FeliCa Communication speed: Baud rate up to 424kBaud Reading distance : Up to 9 cm- depending on tags and antenna
	Human	LEDs, Buzzer
Power	Supply [V_{DC}]	PoE (IEEE 802.3af complaint injector) or +5VDC
	Consumption [W]	Up to 2.5 / 2 typ.
Temperature	Operating [°C]	0 to +55
Humidity	Operating[%]	20 to 80 relative humidity; non condensing
	Non Operating [%]	10 to 90 relative humidity; non condensing