



Nexus Technologies



BRU-5X Magnetic Card Reader Technical Manual

Nexus Technologies
via Buonvicini 21, Firenze
phone: 0555520700
e-mail: info@nexustech.it
web: www.nexustech.it

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1 Overview

BRU-5X is a compact Manual Swipe type card reader.

2 Basic Specification

Dimension	40mm (width) X 154mm (length) X 48,6mm (height)
Weight	190g (approx)
Power Supply	+5V DV \pm 5%
Power Consumption	65mA (max.)
Operation Locus	Indoor Use

3 Specification

Card Standard	ISO 7811/7812		
Track Position	ISO 1 (IATA)	ISO 2 (ABA)	ISO 3 (MINTS)
Recording Density	210 BPI	75 BPI	210 BPI
Recording Capacity	79 Characters (7 bits)	40 Characters (5 bits)	107 Characters (5 bits)
Reading Method	F2F		
Interface	USB		
Card Thickness	0,76 \pm 0,08mm		
Head Function	Read Only 1,5mm		
Operation Speed	10 - 150cm/sec		
Life of Head	500000 card passes (1 pass: one swipe)		
Error rate	0,5% Less Than (JSE Test card)		

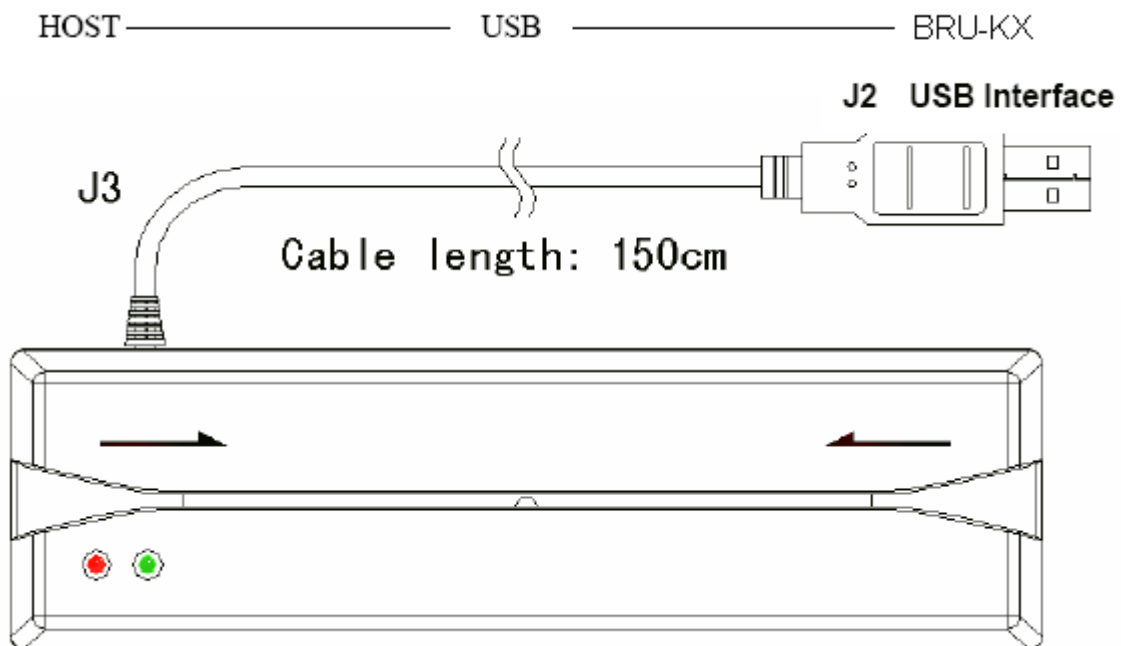
4 Environmental Requirements

Storage ambient temperature: -30°C to +70°C
 Operating ambient temperature: -20°C to +70°C
 Storage ambient relative humidity: 0% to 95%
 Operating ambient relative humidity: 20% to 90%

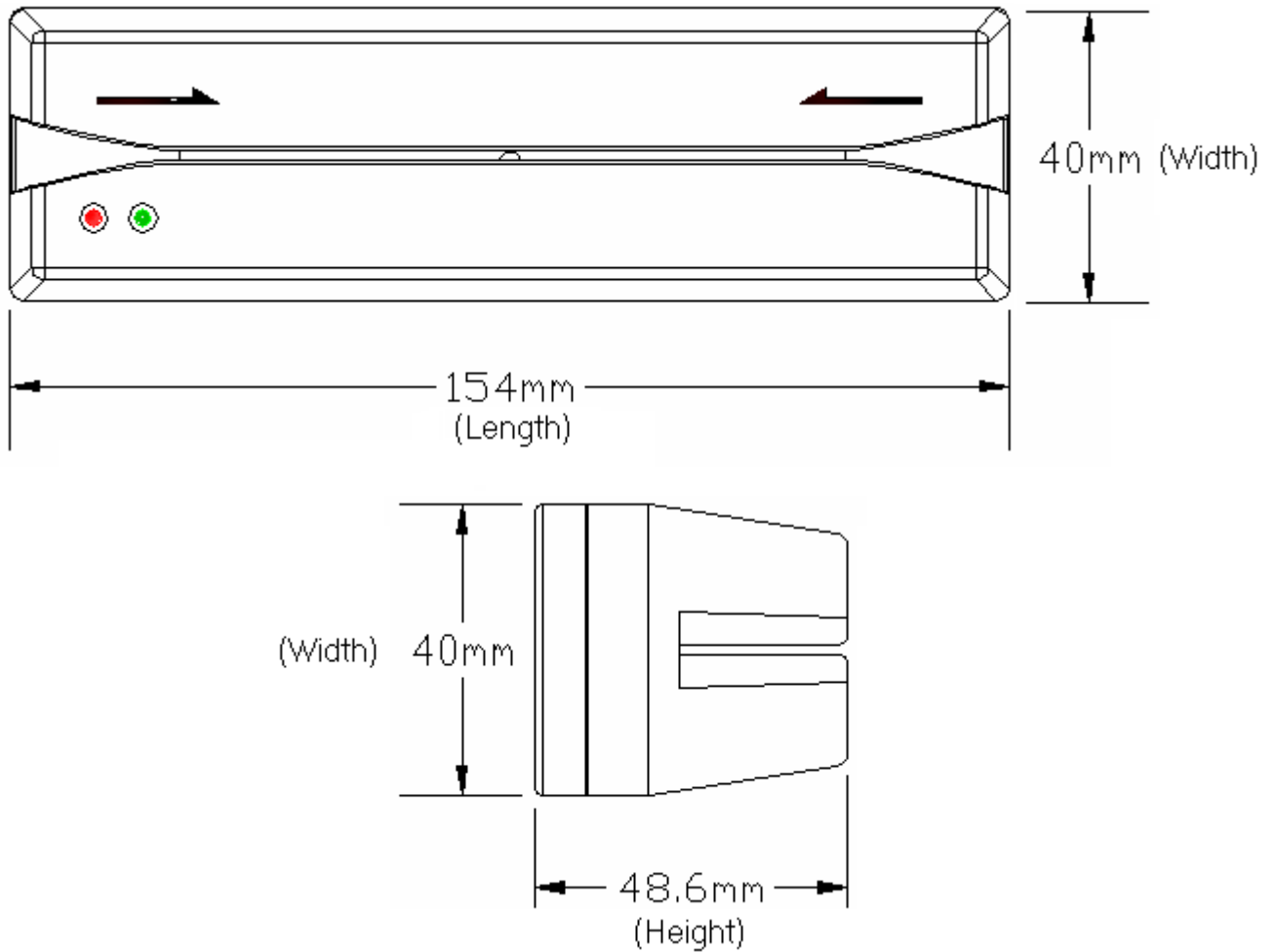
5 Indicator Led Description

Color	Signal	Description
Green	OK	Card reading is normal
Red	Error	Card reading is abnormal

6 System Block Diagram



7 Dimension Drawing



8 Switch Settings

USB Interface			
Switch No.	On-Off Status		Function Description
SW1	(see the following table of Baud Rate) *		SW1 e SW2 are used only to configure Baud Rate *
SW2	(see the following table of Baud Rate) *		SW1 e SW2 are used only to configure Baud Rate *
SW3	ON: Switch	OFF: Do not switch	Switch in track 1 and track 3
SW4	ON: Do not beep	OFF: Beep	Beep after a card is swiped
SW5	ON: Do not alarm	OFF: Alarm	Alarm 3 times if an error has occurred
SW6	ON: Use ";"	OFF: Use "+"	If SW7 is OFF, you can choose the character with whom Track 3 will start
SW7	ON: Disable	OFF: Enable	Inserisce i caratteri di inizio e fine in ogni traccia.
SW8	ON: Add	OFF: Do not add	Aggiunge un "INVIO" alla fine.

Default settings are: SW1 and SW8 ON, other switches OFF.

* Switch Settings for Baud Rate		
SW1	SW2	Baud Rate
OFF	OFF	2400
OFF	ON	4800
ON	OFF	9600
ON	ON	19200

By default SW1 is ON and SW2 is OFF.