



ACT-IR220L/LE
IrDA Serial Port Adapter
Product Specification Summary



ACTiSYS Corp.
48511 Warm Springs Blvd, Suite 206
Fremont, CA 94539, USA
TEL: (510) 490-8024, FAX: (510) 623-7268
E-Mail: irda-support@actisys.com
Web: www.actisys.com



FCC & VCCI Compliance Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference and (2) this device must accept any interference received, including interference that may cause undesired operation.

WARNING-FCC Regulations state that any unauthorized changes or modifications to this equipment not expressly approved by the manufacturer could void the user authority to operate this equipment

NOTE: This equipment has been tested and found to comply with the limits for Class B digital device, pursuant to Part 15 of the FCC Rules. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Increase the separation between the equipment and receiver.
- Reorient or relocate the receiving antenna.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This equipment is in the 2nd Class category (information equipment to be used in a residential area there to) and conforms to the standards set by the Voluntary Control Council For Interference by Data Processing Equipment and Electronic Office Machines aimed at preventing radio interference in such residential area.

When used near a radio or TV receiver, it may become the cause of radio interference. Read the instructions for correct handling.

NOTE: Must be used with shielded cable only.

FOR YOUR RECORDS

For your assistance in reporting this product in case of loss or theft, please record the model and serial number which are located on the bottom of the case. Please retain this information.

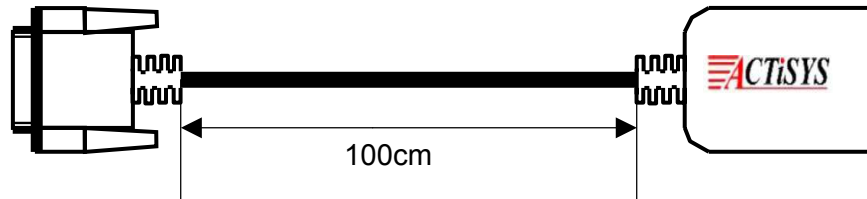
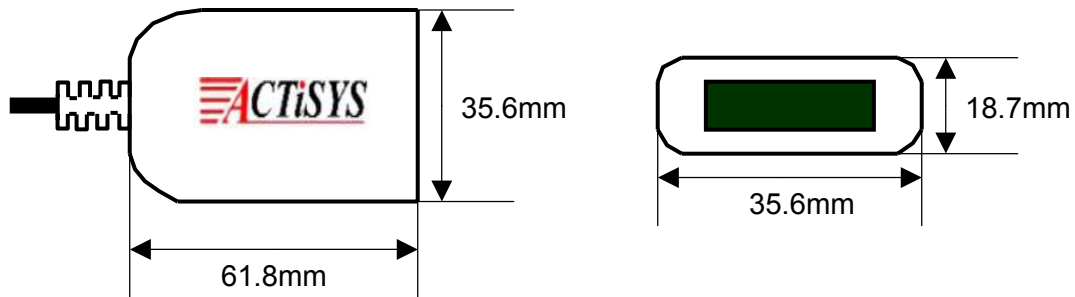
Model Number	Serial Number
Date of Purchase	Place of Purchase

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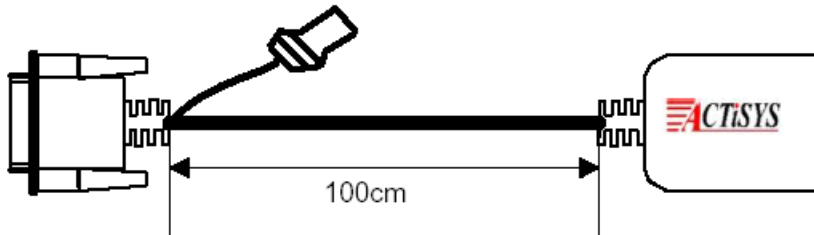
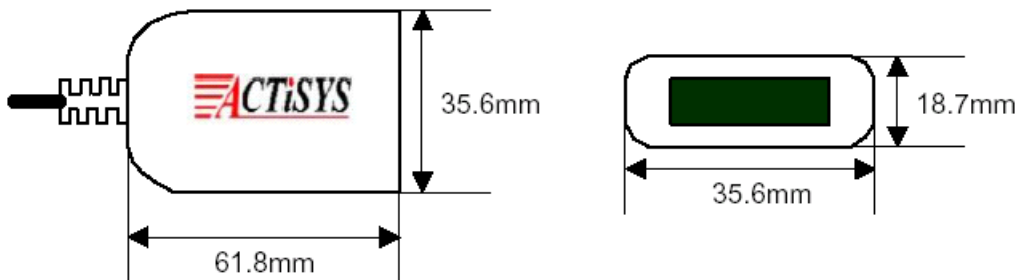
Product Introduction

IR220L An IrDA dongle which supports 4 baud rates : 9.6K, 19.2K, 57.6K and 115.2K bps. It gets power from DTR and RTS in normal RS232 port.

IR220LE Same as IR220L, except it can input external DC power to it. Power should be 6V~7.5V. If your host device didn't provide DTR and RTS, then you can use external power.



IR220L



IR220LE

Connector Pin Definition

Signal Name	Pin Number	Signal Description
DCD	1	Not Connected
Rx	2	Data transmitted from IR220L / 220LE to PC
Tx	3	Data transmitted from PC to IR220L / 220LE
DTR	4	Supplies power and selects baud rate
GND	5	Signal Ground
DSR	6	Connected internally to DTR
RTS	7	Supplies power and selects baud rate
CTS	8	Not Connected
RI	9	Not Connector




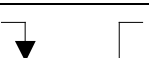
External power input connector Pin Definition

Signal Name	Pin Number	Signal Description
Tip		Positive (5.5V~7.5V)
Around		Ground

Baudrate Selection Algorithms

IR220L/LE - Pulse MODE

ACT-IR220L/LE is a baud rate selectable adapter, it supports 4 baud rates by changing DTR and RTS signals from serial port. Set RTS and DTR to the following static state to select the baud rate in the following table:

Symbol	DTR	RTS	Descriptions
9.6Kbps		Don't Care	Basic backward Compatible modes
19.2Kbps	Hi	1 x 	
57.6Kbps	Hi	2 x 	
115.2Kbps	Hi	3 x 	

Electrical characteristics

PARAMETERS	MIN.	TYPICAL	MAX.	UNITS
DC supply voltage	4.8	5.0	5.5	V
External power input	5.5	6.0	7.5	V
Supply voltage, VSS		0		V
Operating free-air temperature range, TA	0		40	°C
DC current (Ready mode)		2		mA
DC current (Active mode)		100		mA
RS232 signal threshold level	+/-3		±12	V

Transmission Characteristics

PARAMETERS	TYPICAL	UNITS
IR transmit pulse width	1.63	uS
Optical cone angle	+/-15	Degree
Transmission distance	1 to 200	cm
Receiver Latency	100	uS

Specifications

Physical Layer	IrDA – 1.0 (SIR) compatible
Communication Dist. & Speeds	Communication speeds programmable at
Connection	Standard PC 9 pin DSUB – Female RS-232 Serial COM port to IrDA communication
Power Source	RS-232 port power only. No external power required.
Power Consumption	0.3W (Peak)
Dimensions / Weight (Excluding Cable)	Dimension : 2.4”(L) X 1.4”(W) X 0.74(H) 61.8mm X 35.6mm X 18.7mm Weight : 2.85oz (77.2gm)
Temperature Range	0°C to 40°C (32°F to 104°F)
Cable Length	100cm ± 3cm
External power cable length	10cm ± 2cm

Material Composition

Component	Material	Part Number	UL Flame Rating	Colour
Top Case	ABS : GE GPP 4500 / GE GPM 5500	03-502-006	UL94HB	Black / Beige
Bottom Case	ABS : GE GPP 4500 / GE GPM 5500	03-502-007	UL94HB	Black / Beige
Lens	GE Lexan PC (IR) 920A / 940A / 141L	03-502-008	UL USA E 121562 UL 94V-2 (0.061") UL 94V-0 (0.12")	DYE 21051
Cable	Cable Insulation : PVC	03-402-004	UL 2725 USB Cable	Black / Beige
Cable Molding Compound	PVC		UL94HB UL94V-O	Black
PC Board	FR-4	03-A03-001	UL94V-O	Green

Regulatory Specifications

Radiated and Conducted EMC

FCC-B

VCCI-2

EN50081-1 EN55022 (1988)

Susceptibility Compliance

EN50081-1 (1992) EN55024 (1998) EN61000-4-5 (1995)

EN55022 (1998) EN61000-4-2 (1995) EN61000-4-6 (1996)

EN61000-3-2 (1992) EN61000-4-3 (1995) EN61000-4-8 (1994)

EN61000-3-3 (1995) EN61000-4-4 (1995) EN61000-4-11 (1994)

Warranty Information

THE FOLLOWING WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS. YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

ACTiSYS Corporation warrants to the first consumer purchaser, for a period of one year from the date of purchase, that this wireless interface ("the Product") will be free from defective workmanship and materials, and agrees that it will, at its option, either repair the defect or replace the defective Product or part thereof at no charge to the purchaser for parts or for labor.

This warranty does not apply to any appearance items of the Product, any consumable items such as paper, ink ribbon, or batteries supplied with the Product, or to any equipment or any hardware, software, firmware, or peripheral other than the Product. This warranty does not apply to any Product the exterior of which has been damaged or defected, which has been subjected to misuse, abnormal service or handling, or which has been altered or modified in design, construction or interfacing. **Tampering With Label Voids Warranty.**

In order to enforce the rights under this limited warranty, the purchaser should mail, ship, or carry the Product, together with proof of purchase, to ACTiSYS.

The limited warranty described above is in addition to whatever implied warranties may be granted to purchasers by law. To the extent permitted by applicable law, ALL IMPLIED WARRANTIES INCLUDING THE WARRANTIES OF MERCHANT ABILITY AND FITNESS FOR USE ARE LIMITED TO A PERIOD OF ONE YEAR FROM THE DATE OF PURCHASE. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

Neither the sales personnel of the seller nor any other person is authorized to make any warranties other than those described above, or to extend the duration of any warranties beyond the time period described above on behalf of ACTiSYS Corporation.

The warranties described above shall be the sole and exclusive remedy available to the purchaser. Correction of defects, in the manner and for the period of time described above, shall constitute full satisfaction of all claims, whether based on contract, negligence, strict liability or otherwise. In no event shall ACTiSYS Corporation be liable, or in any way responsible, for any damages or defects in the Product which were caused by repairs or attempted repairs performed by anyone other than ACTiSYS technician. Nor shall ACTiSYS Corporation be liable or in any way responsible for any incidental or consequential economic or property damage. Some states do not allow the exclusion of incidental or consequential damages, so the above exclusion may not apply for you.

ACTiSYS Corporation warrants to the first consumer purchaser, for a period of 1 year from the date of purchase, that this wireless interface (The Product? Will be free from defective workmanship and materials, and agrees that it will, at its option, either repair the defect or replace the defective Product or part thereof at no charge to the purchaser for parts or for labor.

This warranty does not apply to any appearance items of the Product, any consumable items such as paper, ink ribbon, or batteries supplied with the Product, or to any equipment or any hardware, software, firmware, or peripheral other than the Product. This warranty does not apply to any Product the exterior of which has been damaged or defected, which has been subjected to misuse, abnormal service or handling, or which has been altered or modified in design, construction or interfacing. Tampering With Label Voids Warranty.

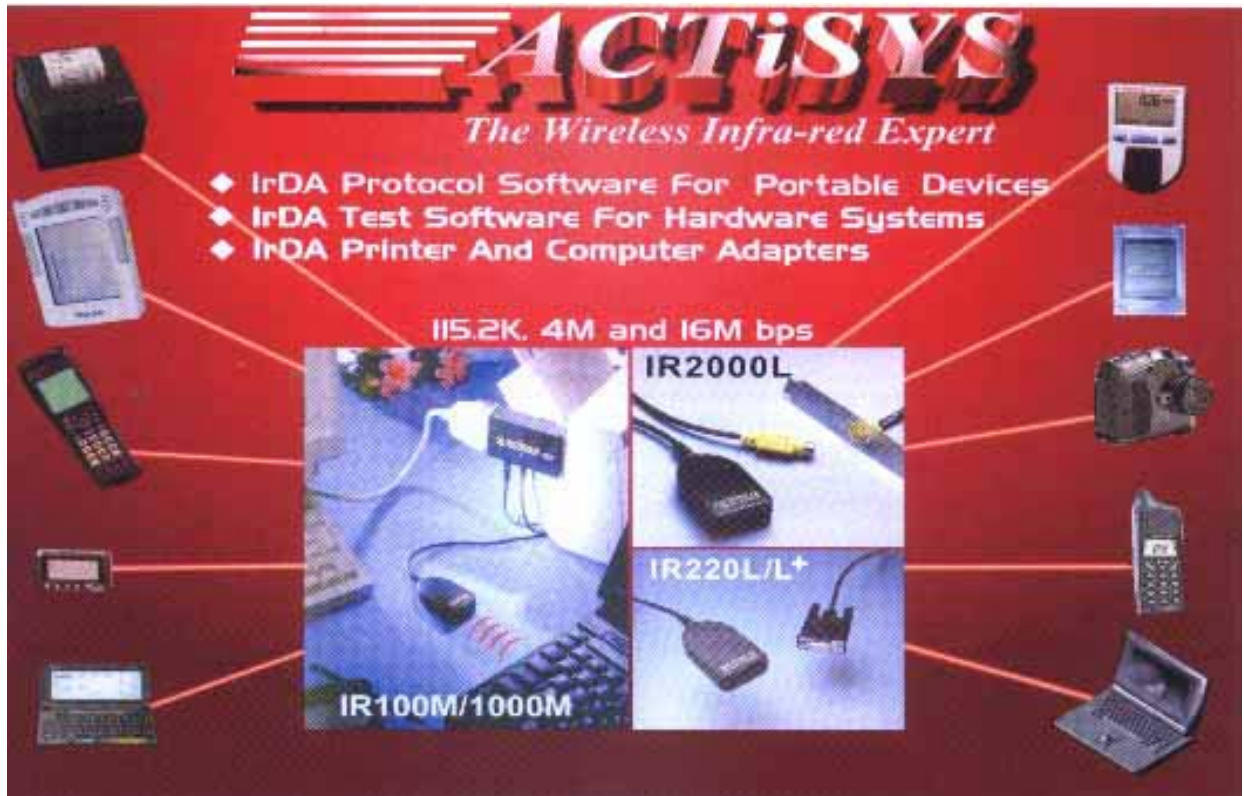
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The limited warranty described above is in addition to whatever implied warranties may be granted to purchasers by law. To the extent permitted by applicable law, **ALL IMPLIED WARRANTIES INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR USE ARE LIMITED TO A PERIOD OF 1 YEAR FROM THE DATE OF PURCHASE.** Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

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CONTACT INFORMATION



ACTiSYS
The Wireless Infra-red Expert

- ◆ IrDA Protocol Software For Portable Devices
- ◆ IrDA Test Software For Hardware Systems
- ◆ IrDA Printer And Computer Adapters

115.2K, 4M and 16M bps

IR100M/1000M

IR2000L

IR220L/L+

The advertisement features a central red background with the ACTiSYS logo at the top. Below the logo, three bullet points list the company's offerings: IrDA Protocol Software For Portable Devices, IrDA Test Software For Hardware Systems, and IrDA Printer And Computer Adapters. A central text block specifies data rates of 115.2K, 4M, and 16M bps. Below this, three images show different IrDA products: IR100M/1000M (a small device connected to a laptop), IR2000L (a device with a yellow cable), and IR220L/L+ (a device with a black cable). The background is decorated with various electronic devices like a printer, a PDA, a mobile phone, a camera, and a laptop, all connected by red lines to the central product images.

USA OFFICE :

ACTiSYS Corporation.
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E-Mail : irda-support@actisys.com
Web : www.actisys.com

TAIWAN OFFICE :

3rd Floor No.12, Prosperity II Road,
Science Industrial Park, Hsin Chu, Taiwan,
Republic Of China.
Tel : (886-3) 578-5161
Fax : (886-3) 578-5164
E-Mail : tech-support@actisys.com