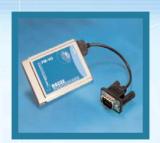








WINNER



# PM-020 & PM-143 PCMCIA 1 PORT VELOCITY RS232

SERIAL CARDS ENGINEERED TO EXCEED EXPECTATIONS



# Features

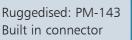
- 1 Port RS232
- PCMCIA TYPE II
- 128 Byte FIFO with user definable trigger level
- Up to 921,600 baud
- Standard and Ruggedised Options
- Drivers for all popular operating systems
- Sample Programs, Test & Terminal software - all with source code
- Lifetime Support and Lifetime Warranty

## Click on each feature to find similar products

## Options



Standard: PM-020 Detachable connector





For 2 Port see: PM-120 and PM-132

Description

A PCMCIA type II card providing one RS232 serial port. Velocity megabaud data transfer rates and the 128 byte deep FIFOS, coupled with 1Mbit/s line drivers deliver uncompromising performance on your laptop PC. Being mobile no longer limits your options.

Standard and ruggedised card options to suit your needs.

Now with Brainboxes Lifetime Warranty and Lifetime Support!

## Software

Microsoft signed drivers (easy installation & robust operation) for:

- Windows Server 2003 x32 bit & x64 bit Editions 0
- Windows XP x32 bit & x64 Editions 0
- 0 Windows 2000.



Fully tested drivers also included for:

- Windows Me, Windows 98 & 95, Windows NT 0
- Windows CE

As well as: full product documentation, a thorough troubleshooting guide and terminal software. Detailed sample source code for all popular programming languages.

Need support for other operating systems? Please telephone or email. Find out about Brainboxes excellent driver configurability: Click Here



ORDER Description PCMCIA 1 PORT VELOCITY RS232 RUGGEDISED PCMCIA 1 PORT VELOCITY RS232

Code PM-020 PM-143

TEL: +44 (0) 151 220 2500

WEB: WWW.BRAINBOXES.COM







PM-020 PM-143

PCMCIA 1 PORT VELOCITY RS232

Full Specification

Product Code	UC-257	
Serial Port		
Pin 1 DCD Pin 2 RXD Pin 3 TXD Pin 4 DTR Pin 5 GND Pin 6 DSR Pin 7 RTS Pin 8 CTS Pin 9 RI	Ports Connector UART type FIFO size Powered Output Transmitted Signal Strength Operating Distance	1 Port RS232 DB9 (9 Pin Male) - PM-132 connector is built in and ruggedised 950 UART inside Brainboxes BB16CF950+ 128 Byte with user definable trigger level No (for powered output see Universal Powered range (UP)) +/- 12 Volts open circuit RS232 Standard 100ft (30metres) RS232 Standard
Serial Port Settings		
	Baud Rate (bits per second) Data Bits Parity Stop Bits Flow Control IRQs Connection Schemes	up to 921,600 5,6,7 or 8 Odd, Even, None, Mark or Space 1, 1.5 or 2 CTS/RTS DTR/DSR Plug and Play - Shared interrupts for all ports Point to Point
General		
	PCB Layers Power Consumption Weight Size	4 210mA @ 5V 20mA @ 12V 0.067Kg (PM-020) , 0.049Kg (PM-143) PCMCIA TYPE II
Interface		
	BUS OS Compatibility PCMCIA Compliance	PCMCIA Windows XP x64 bit Edition / Windows Server 2003 x64 bit Windows 95/ 98/ NT/ Me/ 2000/ XP/ Server 2003 Windows CE* PC Card Standard-February 1995
Microsoft Approvals		Windows Server 2003 Editions, Windows XP Home, Windows XP Professional
Approvals & Accreditations		UL, EMC: CE, FCC, PCMCIA Affiliate Member
Box Contents	USA.	Installation CD including manual, Microsoft signed drivers, utilities and sample programs with source code PCMCIA 1 PORT VELOCITY RS232 Fully wired Moulded Cable (PM-143: built into card) Installation Guide
OEM option		Available for bulk buy OEM
Product Support		Lifetime Email and Phone Support from fully qualified, friendly staff 40 hours a week
Warranty		Lifetime
Made In	Elektra O5 UNDE IN EU MADE IN EU	Manufactured in the UK by Brainboxes Winner 2005 European Electronics Industry Awards "Manufacturer of the Year"
Customisable		Brainboxes operate a "Perfect Fit Custom Design" policy for volume users More Info: <u>CLICK HERE</u> <i>*This product works in Windows CE up to 115 200 band</i>







PM-020

PM-143



# PCMCIA 1 PORT VELOCITY RS232

# **Product Features Explained**

# PC Card

PC cards allow all the functionality of Brainboxes serial cards to be brought to your laptop. All Brainboxes PC cards are Type II cards and are compatible with 3.3V and 5V PCMCIA slots. More info on 'Universal' products: <u>Click Here</u>

# Microsoft Logo Approval

The majority of Brainboxes products, including this one, have been approved by Microsoft as a fully tested and compatible product with popular Microsoft Operating Systems. For the full list of Brainboxes approved products see the **Microsoft website:** <u>Click Here</u>

# **PCMCIA** Compliant

All Brainboxes PC cards are fully "PC Card Standard-February 1995" compliant, in accordance with the PCMCIA, (Personal Computer Memory Card International Association) the Special Interest Group for PC card design and manufacture.

## Large FIFO

FIFO means First In First Out, a FIFO is memory space on the Brainboxes card. A larger FIFO allows more memory space for buffering data, so calls to the computer processor are less frequent. This significantly increases data throughput and improves CPU availability for other applications. More info: <u>Click Here</u>

## 4 Layer PCB

Printed Circuit Board with 4 layers of circuitry complies with the Brainboxes best practice guideline and ensures a more reliable card. 1 layer is for power and 1 for ground which leads to greater EMC shielding for the signals. This ultimately gives greater signal integrity.

## Surface Mount Components

All components on a Brainboxes PC card are placed by a surface mount machine. The surface mount machine allows for highly accurate and fast production of Brainboxes cards. Orders can be met quickly, reliably and with outstanding quality.

#### Capacitors

All Brainboxes PC Cards have capacitors connected to all the power pins on the PC connector, near to the connector, and at points where signals switch layers. This ensures that the electrical power rails on the Brainboxes card stay at the right voltage, regardless of the power demands placed on them. This helps data signals keep their integrity.





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# Brainboxes' Service

"Brainboxes offers free lifetime support for ALL customers."

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We aim to provide industry leading support for our customers. Our highly trained and helpful support engineers sit and work closely with the product designers, developers, and testers to ensure an in-depth knowledge of the products. Support can be found by emailing <u>support@brainboxes.com</u> or calling: +44 (0)151 220 2500 during UK office hours. Support website: <u>www.brainboxes.com/support/index.asp</u>

"Brainboxes' passionately believes in the quality of its manufacturing process and will reflect this by offering a Lifetime Warranty on ALL of its PCMCIA serial card range."

Brainboxes is pleased to be able to extend a new Lifetime Warranty for all PCMCIA serial cards products. We have introduced this based on our exceptional manufacturing and design quality and the company ethos of kaizen.

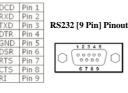
# Brainboxes' Kaizen

#### "Brainboxes constantly strives to achieve higher standards for the benefit of customers."

'Kaizen' is a Japanese term meaning 'continuous improvement'. Kaizen has been implemented throughout Brainboxes, resulting in significant improvements to our products and our customer service, as illustrated by the development of our own custom ASIC "LYNX" and our new lifetime warranty. As part of this

ongoing process, in 2004 we embarked on 'Lean' and '6 Sigma' programs which are successfully increasing productivity and efficiency in all areas of the company. **More Info:** <u>Click Here</u>

## RS232 Standard



RS232 is the best known industry standard providing asynchronous serial communication using  $\pm$  12 Volt logic levels over distances up to 100 feet (30 metres). RS232 can be configured to suit all needs from 3 wire

communication (using transmit, receive and ground lines only), to more complex hardware and software handshaking. **More info:** <u>Click Here</u>





