



Newbury Data: Member since Oct 2003



Newbury Data is the UK's leading manufacturer of industrial serial impact printers and thermal print/encode (Travel Ticket) printers. Manufacturing printers since 1974, Newbury Data's reputation for our own high quality and highly reliable printers has made us the number one partner of choice to distribute thermal printers for the worlds leading manufacturers such as Citizen, Printronix and Zebra.

30 years of printing expertise means Newbury Data has the skills and understanding of printer communication and programming. This allows Newbury Data to seamlessly integrate new printing solutions into existing systems without changes to the current data streams, a vital requirement when integrating current technologies such as Citizen and Zebra Desktop & Mobile printers, or Printronix and Zebra RFID Printer/Encoders and SAMSys RFID Readers.

Newbury Data's expertise in impact and thermal printing solutions has allowed us to develop unique solutions to help customer migrate from legacy desktop or stand alone systems to Mobile, Wireless, RFID and fully automated solutions interfacing into the latest WMS and ERP systems. Complimenting our printing solutions, Newbury Data has become partners with Datalogic and Psion Teklogix to be able to deliver full data capture solutions including customer specific ERP Middleware or full WMS solutions, making Newbury Data one of the most sophisticated GS1 Auto ID solutions providers in the UK.

## GS1

Working together to maximise benefits through the use of global supply chain standards

In business, a strong working relationship between the customer and the supplier is critical to success. To help you work effectively with your supplier we have created the GS1 UK Solution Provider Programme. Membership of this programme is only for solution providers that offer products and services that support the use of GS1 global supply chain standards for:

- Bar codes
- Electronic business messaging
- Global data synchronisation
- Radio Frequency



All solution providers are also members of GS1 UK and have signed a Code of Practice, showing real commitment to providing excellent value and service to their customers.

## Healthcare Applications where Newbury Data's SecurPrint Solution can help support the 5 R's.

Bar codes, which have been used extensively in supply chain applications to reduce mistakes, speed up processes and cut costs, are equally useful in healthcare administration, only this time it's people rather than products who are being identified and tracked, and any mistakes can be far more costly both emotionally and financially.

### **Blood Transfusions**

- Blood transfusions are an area of extreme risk, where inaccurate identification can lead to potentially fatal errors. Blood bags are routinely bar-coded with their type, but when the bags are issued from the blood bank, it is important that the right blood gets to the right patient. Adding a validated label from SecurPrint with the intended patient's details, including their bar-coded ID, enables additional safety checks to be made automatically before the blood is given.
- Automate identity verification to cut risks when the blood bank receives an order and issues blood to the patient, a compatibility label is printed and attached to the blood bag. Before the transfusion is administered, the bar codes on both the patient's wristband and the compatibility label are scanned to confirm that the correct blood is being given to the correct patient.

### **Patient Identification**

- Patient identification, applying a validated bar code label to an existing or new wristband provides a critical first step in many patient safety improvement initiatives. Incorporating a bar code as well as text provides a vital extra safeguard against mistaken identity. Using printed bar codes and text via SecurPrint rather than hand-written information on wristbands also ensures that all required data is readable.

### **Medial Records**

- Medical records that carry a printed label incorporating a bar code and text are a more reliable way to ensure that each patient's record can be uniquely identified and tracked. In busy outpatients' department, it is not unusual for there to be two patients attending who have similar names. Crosschecking a validated bar code printed via SecurPrint ensures that records do not get put into the wrong folder and it is a quicker and more accurate check than one done purely visually.

### **Laboratory Specimens**

- Laboratory specimens need to be accurately identified. Printing via SecurPrint and validating the bar code on the patient's record, or the wristband if on the ward, ensures that the full and correct data can be transferred to the specimen label automatically.

### **Prescription Vial Labelling**

- The shrinking number of pharmacists and the growing number of new medications, packaging options, and patient privacy and safety requirements all add complexity to prescription processing. SecurPrint helps bring clarity, with labelling systems that add accuracy and efficiency. Discover how reliable, easy-to-use, SecurPrint thermal printer solutions deliver convenience and safety at the point of fill.

Newbury Data's SecurPrint solution on Citizen and Zebra thermal printers is a convenient way of producing the labels at any location in the hospital.

## SecurPrint

Newbury Data has worked exclusively with Citizen Systems Co Ltd to produce a SecurPrint solution for the Citizen CLP521 and CLP621 thermal printers. The firmware required is only available from Newbury Data and allows single or multiple (picket fence) bar codes to be read per label.

### SecurPrint – Bar Code Read-After-Print Solution

Q. What is the most common application for thermal label printers?

**Answer: Printing Bar Codes**

- Q. What is the most important error condition that a thermal printer can not tell you?  
Q. What is the most important error condition not reported by the front panel or via the network?  
Q. What could or does stop your expensive automated processes or production lines?  
Q. Why might you receive compliance fines?

**Answer: No Read Bar Codes**

### Why do you need SecurPrint?

In real-life, label production runs with thermal type printers, bar code image quality can be degraded by conditions that are external to the printer mechanism. Any thermal printer, even a top quality model like the Citizen CLP521 and CLP621, can print degraded bar codes. No thermal printer is immune, that's why you need SecurPrint.

### Problems that affect print quality:

- A wrinkled ribbon
- Label media defects
- Burned print head pixels
- Mis-aligned media
- Improperly adjusted heat, speed, or pressure

### Problems that occur from poor or unreadable bar codes:

- Incorrect identification of Patient(s)
- Incorrect Identification of Blood (Groups/Type)
- Incorrect Identification of Laboratory Specimens
- Additional and/or expensive reworking via manual data entry.

### Exactly what does SecurPrint do?

Whatever condition causes degraded image quality, the fault is not likely to be seen by the naked eye. This could result in the production of a large number of bad bar codes before the problem is detected. SecurPrint checks all picket fence bar codes for scannability immediately after the labels are printed ... without any manual intervention. This read-after-print quality control avoids insertion of bad bar codes into the label production run.

When the scanner identifies a "No Read" bar code the printer pulls the label back approximately 1 inch into the printer and overprints the label with the words "**Validation Error**". It then issues an "Urgent - Stop" label alerting the operator to the problem, informing them to remove/discard the previous label and the error alert. The operator identifies the reason for the "No Read" and makes the necessary corrections or changes to the printer, then by simply pressing the "pause" button the printer "reprints" the degraded label and normal printing continues without loss of data.

The input barcode(s) must be sent to the printer using internal specific barcode instruction(s), preferably by direct FGL programming commands and not as a graphic such as 'BIT' images generated by software programmes. This allows the system to detect the barcodes to be read by the scanner.

Alternatively, this can also be achieved by using label design software programmes such as Bartender with Seagull drivers or Codesoft with Codesoft drivers' etc, or as long as the combination of software and driver used sends the printable data to the printer in the required FGL programming commands.

### Result

Little or no loss of productivity, no increased production costs due to manual intervention and no heavy fines due to bad non-scannable bar codes.

### Connecting the Scanner to the printer

- The Scanner is attached to the lid of the printer by a toughened plastic arm that is permanently fixed in place. Fixing the scanner to the printer ensures the scanner is in the optimised position at all times.
- The interface cable is then run under the lid and fixed in place to run to the rear of the lid.
- The scanner interface cable is then connected to the printer's serial interface connector.
- Dampers are positioned inside each side of lid to ensure the lid cushions when closed and does not slam down to avoid any potential damage to the scanner.
- Additional screw fixings are inserted in the hinges of the lid, ensuring the lid does not come loose or be removed from the printer.

**For further details, demonstrations or prices please contact Newbury Data sales on 01606 593424.**



## CITIZEN

Citizen Systems Europe offers a complete range of computer printers for business, industrial and home use. Best known for its comprehensive family of dot matrix printers, in recent years Citizen has established its reputation as a manufacturer of high quality, reliable label and barcode printers.

### Printers for the Auto ID Market

Citizen's unique pedigree in electro-mechanical printers makes dedicated label printers a natural extension to its family of office desktop and portable products. Offering a wide choice of printers for the Auto ID Market, from portable 'PDA', barcode-capable printers with infrared (IrDA) interfaces to high speed industrial label printers, Citizen combines highly specified products and reliability at cost-effective prices. The CLP family of direct thermal and thermal transfer label printers is designed to suit various applications including healthcare, manufacturing, warehousing, retail and baggage-handling. Citizen's barcode label printers support a wide range of industry standard barcodes, with a complement of scaleable and fixed fonts, including international characters. With a variety of options and accessories available, Citizen is the obvious choice for quality, reliability and innovative, easy-to-use barcode labelling systems.

### Citizen Desktop Thermal Printers

It has always been Citizen's tradition to produce unique and innovative label printers, CLP 521 and CLP621 are no exception. Even though the CLP 521 and CLP621 are aimed at the entry level and desktop printer environment, they are packed full of features and options usually only found on high performance machines. However, in a world where price is the key to so much, Citizen have used their skills in precision manufacturing to produce a high performance printer that the bank manager will also like.

#### CLP521 - Direct Thermal



#### CLP621- Thermal Transfer



### CLP521 & CLP621 Features

- Print speeds up to 4 inches per second
- 4.1 inches (104mm) print width at 200 dpi
- Metal clamshell for durability and strength
- Plastic case for style and cost
- Easy-to-service mechanism - change a print head or platen in a minute
- IEEE 1284 Parallel, Serial and USB as standard
- User-installable Ethernet 10/100 option with Wi-Fi option
- Internal paper roll up to 5 inches, 125 mm diameter
- Windows 95, 98, 2000, NT4 and XP compatibility using Citizen's drivers
- True type font support as standard.
- Flash memory available for users as standard
- Ideal for storing true-type fonts, logos and graphics

### Metal mechanism for reliability

Another tradition for Citizen has been its clamshell mechanisms. Often emulated (but never bettered) our engineers worked tirelessly to develop a newer and even simpler system. The mechanism still uses an all-metal construction for the clamshell to make sure the printer is reliable and precise. The print head can be raised to the vertical position for easy cleaning and servicing and the cleverly designed media arm includes an adjustable media sensor.

### Easy-to-use mechanism

The colour-coded operator levers within the printer are designed to make set up easy, quick and efficient and the printer can be configured easily by the Vue-Print menu system developed by Citizen for other printers in its range.

### Internal PSU

Many other machines available on the market have an external power supply which can be kicked or damaged or even simply unplugged by mistake. The CLP 521 doesn't compromise here either with a high performance integrated internal power supply for hassle-free printing and reliability.

### Standard Connectivity: Parallel, Serial and USB.

It's also inevitable that a label printer must be able to connect to all types of computer systems. Traditional serial and parallel ports are still very popular in the market as are the newer USB, high-speed parallel and, of course, Ethernet and Wi-Fi.

- Parallel IEEE1284 as standard
- RS232C serial as standard up to 115,000 bps (required by SecurPrint Scanner, Parallel to Serial Converter supplied if required)
- USB as standard

The Ethernet and Wi-Fi boards can be installed in minutes without removing any covers. As they are internal options, there is no concern that they can get broken or damaged and they do not increase the printer's footprint either.

For further details on Citizen printers: [www.citizen.co.uk](http://www.citizen.co.uk)

Find out more at [www.newburydata.co.uk](http://www.newburydata.co.uk)

<b>Product</b>	<b>Link</b>
Auto ID Solutions	<a href="http://www.newburydata.co.uk/Main/auto_id.htm">http://www.newburydata.co.uk/Main/auto_id.htm</a>
Bar Code Readers	<a href="http://www.newburydata.co.uk/Main/auto_id.htm">http://www.newburydata.co.uk/Main/auto_id.htm</a>
Bar Code Scanners	<a href="http://www.newburydata.co.uk/Main/auto_id.htm">http://www.newburydata.co.uk/Main/auto_id.htm</a>
Barcode Printers	<a href="http://www.newburydata.co.uk/Main/thermal_printers.htm">http://www.newburydata.co.uk/Main/thermal_printers.htm</a>
Barcode Solutions	<a href="http://www.newburydata.co.uk/Main/auto_id.htm">http://www.newburydata.co.uk/Main/auto_id.htm</a>
Barcode Validator	<a href="http://www.newburydata.co.uk/Main/SecurPrint.htm">http://www.newburydata.co.uk/Main/SecurPrint.htm</a>
Barcode Verifiers	<a href="http://www.newburydata.co.uk/Main/barcode_verification_solutions.htm">http://www.newburydata.co.uk/Main/barcode_verification_solutions.htm</a>
Citizen	<a href="http://www.newburydata.co.uk/Main/citizen.htm">http://www.newburydata.co.uk/Main/citizen.htm</a>
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