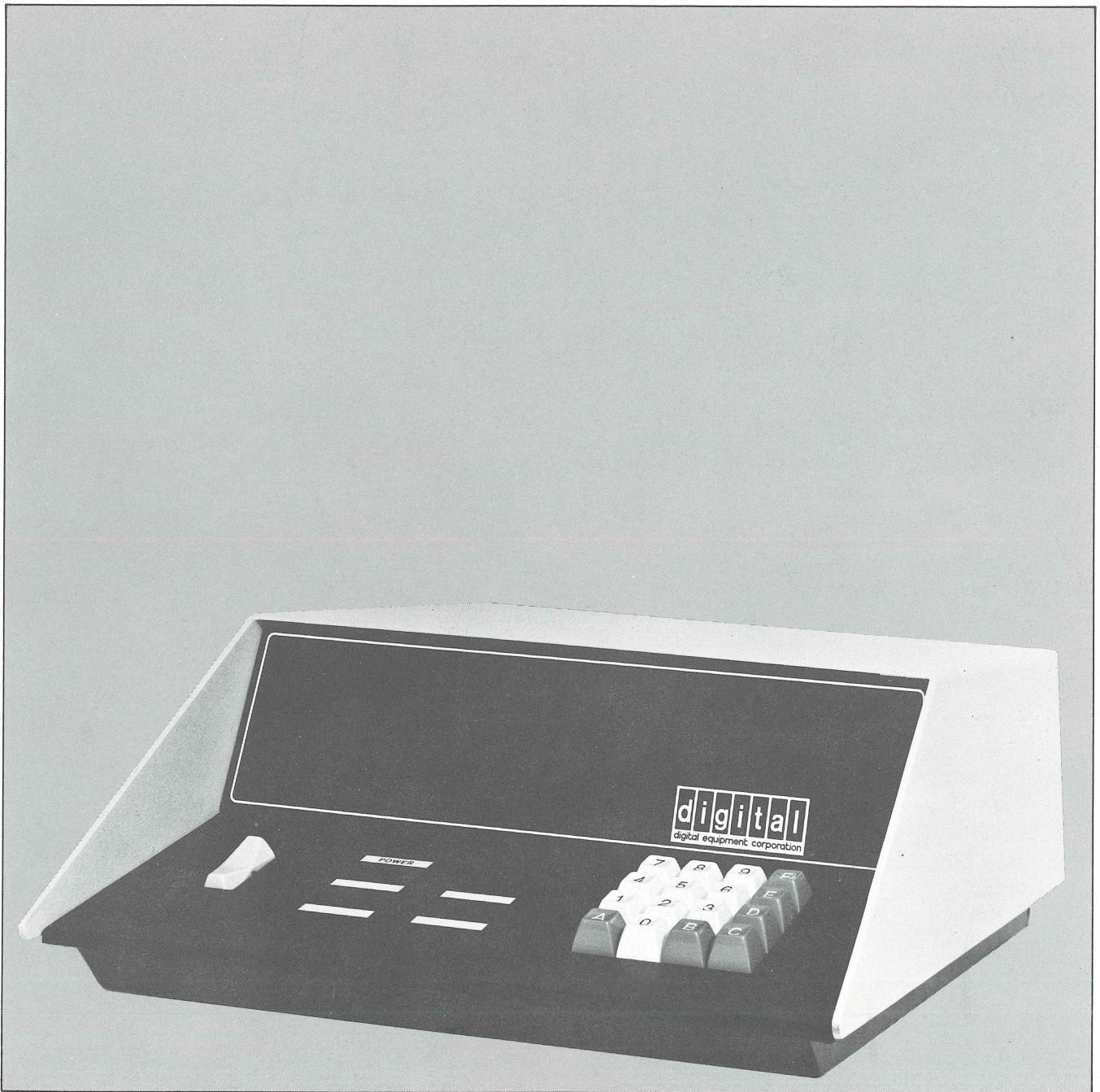


DIGITAL EQUIPMENT CORPORATION

# logic products

## RT01 Application Ideas



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### Hospital records

As medical science has become more complex, hospital records have mushroomed. Computers are probably the most efficient solution to the information explosion problem—most hospital systems employ a central processor to which people gain access through many remote data terminals.

Most common alphanumeric data terminals cost \$ 1500 or more.

Digital's new RT01 terminal costs half that. It is a numeric terminal, not alphanumeric—but for many hospital situations this is quite sufficient.

A typical system would consist of a centrally-located computer with RT01 terminals scattered throughout the hospital. These terminals would enable doctors, nurses, technicians, and recordkeeping personnel to input and receive data simultaneously.

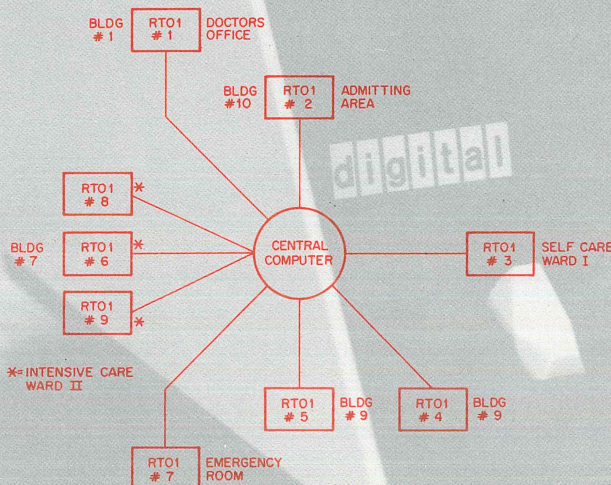
A patient would be assigned a code number when he is admitted. This code would be used by doctors, nurses, etc., whenever data about him was input or output.

A doctor might, for example, request a patient's blood pressure, pulse, and temperature. The data would be input by a nurse in the patient's ward. Or the doctor might request the result of a hemoglobin test, which would be input by a lab technician.

With a central data processor and remote data terminals, doctor need spend less time running down routine patient information, so he has more time for productive work.

The RT01 terminal is especially well suited to hospital use. It is flexible enough to convey most of the necessary information, it is simple to operate, it is light and compact, it connects to the central processor by a single cable.

And it is available for as little as \$600.



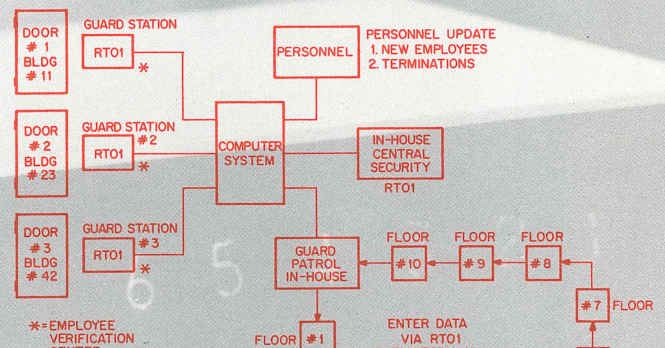
### Plant security

Many organizations can get better protection from theft, vandalism, and industrial espionage with a computerized security system. A typical system consists of a centrally located computer and, at each plant entrance, remote data terminals and devices to identify employees and others authorized admission.

Employee data would be entered into the computer by the personnel department. Updated information would be input via a data entry device such as the low-cost RT01. To update the information, the personnel department would input the badge number and state whether the person is authorized admission or not.

Each entrance would have a badge reader for employee identification and an RT01 data entry terminal. The RT01 would be used to check on an employee who lost his badge before admitting visitors. The guard would type on the RT01 the employee's badge number, and he'd receive a response indicating whether or not the number is valid. In the case of a visitor, the guard would type a visitor number and a control character to signify that the visitor has been admitted.

The RT01, combined with a badge reader and a central computer, provides a simple but very effective way to keep unauthorized persons out.



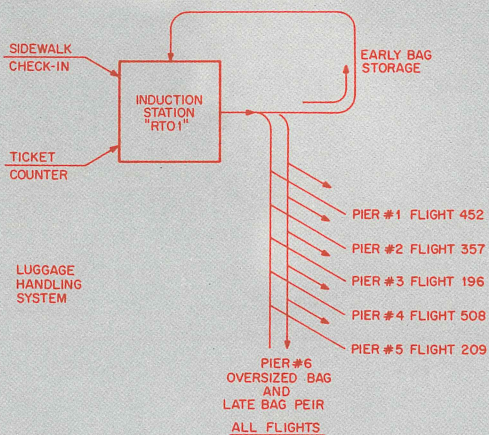
### Airline baggage handling

Many airlines use a computer to speed luggage transfer and reduce loss. The computer keeps track of the luggage location on the conveyor line and selects, according to the flight number, the loading dock where the luggage should be sent. Flight numbers and other pertinent data are entered into the computer via a simple and inexpensive RT01 data entry terminal.

In a typical installation, luggage at the curbside or ticket counter would be placed on conveyors which deliver it to a check-in station. The attendant at the station would

read the flight number from the bag and, via the RT01 terminal, enter it into the computer. Photocells placed along the conveyor line enable the computer to track each bag as it moves along. When a bag reaches its assigned loading dock, the computer generates a signal that activates a mechanism that diverts the bag onto the right dock.

Automatic baggage handling by means of a high-speed computer—controlled conveyor can speed baggage processing and reduce the number of lost bags.



### Credit checks

With a low-cost terminal like the RT01, credit checks can be made faster and with far less chance of error.

In a typical system in a large department store, the credit information would be kept in a central computer located in the credit or accounting department, and a data terminal would be kept at each cash register.

To check on a customer's credit, a clerk would type in the customer's credit card number and the amount of the purchase. Then the computer would send back information about the customer's credit limit.

Alternately, with credit cards that are used in many stores, the computer might be located at the credit organization or at a bank. Remote terminals would be located in each store or in each department of a large store.

The RT01 offers two significant advantages—speed and accuracy—over the conventional system of access by telephone. It can take several minutes to run a credit check by phone (even if the lines aren't busy), and by adding the second person at the other end of the line, the chances of human error are doubled. When the clerk has direct access to the computer via the remote terminal, he gets results instantaneously, and greater accuracy is assured by removing the middleman. In fact, the system is so quick it's practical to check everything twice, virtually eliminating error.

### Inventory control

With RT01 data terminals located in stockrooms and warehouses—and a central computer in the purchasing or shipping department—up-to-the-minute inventory control becomes a reality.

A stock clerk simply types out the stock number, the quantity added to or removed from inventory, and the number of the department to be billed or credited for the items. All this information is automatically logged in the central processor. Whenever anyone needs to know the quantity of a given item in stock, he simply requests the data on a CRT display or printout. Fast, simple, efficient, and inexpensive.

### Automated warehouses

Automated stacker cranes have alleviated many warehousing problems that stem from manual labor—breakage due to careless handling, misplaced merchandise, time lost because of sick days, etc.

Sometimes small computers are used to control stacker cranes, directing the crane to move pallets from different bins. The computer is given a control program in advance—pick-up and delivery requests are fed into computer through a data entry device such as the RT01. The attendant at the control station would push a key to indicate whether the operation was to be a pick-up or delivery; then he'd type in respectively the level, row, and bin that the crane should move to.

An advantage of the RT01 in this application is that it has an extremely simple keyboard—only 16 characters. A warehouse worker who'd be frightened off by the idea of using a computer will have no problems with the RT01.

*These six application areas—hospital records, plant security, airline baggage handling, credit checks, and inventory control, and automated warehousing—are typical of the uses for the low-cost, typewriter-size RT01 data terminal. This is hardly a complete list—there are scores of other situations where it is important for people in many locations to have quick access to centrally-stored information. When the information these people need can be expressed in 12 digits or less, chances are the RT01 is the most economical and convenient data terminal for them to use.*

*Beside its low cost, compactness, and simple operation, the RT01 offers three other important advantages: (1) it is compatible with all of DEC's computers and other communications equipment—in fact, with anything that can communicate with a Teletype; (2) it can be connected to the central processor by simple cables or telephone lines; and (3) it has no moving parts other than the keys themselves, assuring a long, trouble-free life with little maintenance.*

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