

# QANTEL

NOV 18 1974



systems I100 and I200



# simplicity

QANTEL Systems bring simplicity in data processing to the business community.

## Easy to Install

QANTEL Systems 1100 and 1200 require no special air conditioning, no raised floors or special environment, and no additional electrical capacity. QANTEL Systems are compact and designed to blend well with any office space or work environment.

## Easy to Operate

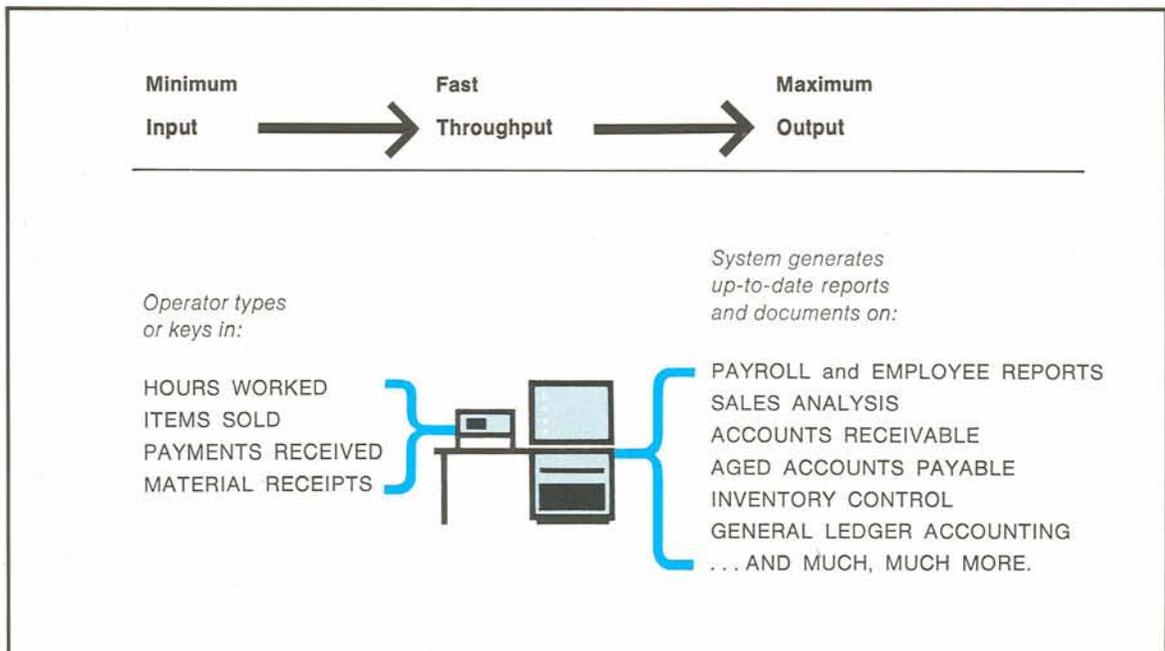
QANTEL Systems 1100 and 1200 can be operated by any clerical employee. Entries are easy to make on familiar typewriter-style keyboards. The operator always has a visual check of entries—either on paper in the familiar Selectric terminal or on the highly-readable screen of the TV-like QANTEL Video terminal. And the systems themselves can be set up to visually instruct an operator at each stage of entry or report preparation. Checking the status of an account, printing checks, writing invoices and statements and preparing reports on inventory, accounts receivable, payroll and sales analysis are simple matters.

## Easy to Learn

It's easy to write and design programs and procedures for Systems 1100 and 1200. QANTEL's new business computer language allows room for even the most complex and comprehensive tasks and reports. QANTEL's language can be learned quickly and easily by anyone experienced in basic programming. Additions and modifications to individual customer programs can therefore be made inexpensively, locally and independently. QANTEL affords not only easy-to-read reference manuals on its language and operating system, but also offers a complete series of customer training courses for both the first-time and experienced computer user.

## Easy to Repair

QANTEL's engineering, manufacturing and assembly process is geared to modularity, so that parts and components can be individually replaced with minimum interference to system operation. Only the most durable and proven components are used in manufacturing, and the most reliable techniques available in the industry are brought to bear in assembly and production. And QANTEL employs its own specially trained staff of service engineers to guarantee smooth installation, rapid repair and maximum uptime all across the country.



# modularity

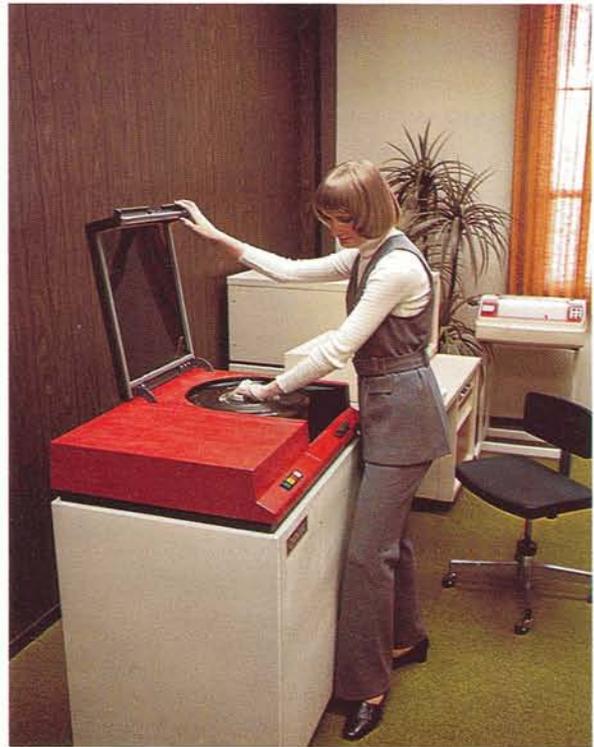


In terms of cost, QANTEL's modularity means paying only for the power you presently need. It also means paying only for the power you need to add. And QANTEL's power can grow and grow as you need it.

## Universal Data Base

QANTEL Systems 1100 and 1200 have the capability of placing all the data and all the files of a business into a common pool of information. One sales entry made into the System affects inventory, shipments, receivables, payables, and general ledger or other business activity. More important, any entry in that universal data base can be called out and applied to any other business activity or program operating on the System. That means an entry has to be made only once. Each entry, moreover, is interactive within the System, adjusting all other entries to which it relates and instantaneously becoming available for the use of any program on the System.

Two key features of the QANTEL Systems 1100 and 1200 make this universal data base possible: our own simple-to-learn business language and our expandable disc storage capabilities.



QANTEL's expandable disc storage capability assures that there will be sufficient room within this data base to accommodate large increases in volume.

On-line disc storage capabilities can be increased from six million characters of alphanumeric data all the way up to 120 million characters of alphanumeric data. Combined with our business language, this capability enables QANTEL to truly "grow" with our customers—on a modular, as-needed and cost-effective basis.

## Multiple Workstations

Time-sharing is the capability of more than one device to communicate with a system's computer simultaneously. QANTEL gives every one of its customers that capability.

On System 1100 an extra input/output device—such as a Selectric terminal or an additional Video terminal communicating directly with the computer—can be connected at any time. System 1200 is designed to accept six workstations. Depending on the requirements of the application additional workstations can be added through the use of our inexpensive terminal controller.

This ability to add workstations to meet demand means that a QANTEL customer's



business could double or triple without his ever having to consider a new computer system. He can add workstations and input capacity as he needs them.

Additional terminals, moreover, won't slow down the operations of QANTEL Systems. That's because the internal speed of the QANTEL computer can be measured in only thousandths of a second. All input, output and processing takes place at speeds far faster than either the operator or the terminal can notice. So each operator and terminal appear to have sole access to the computer's resources, when in fact those resources are being shared by several workstations.

### Multiple Printers

QANTEL provides more variety and greater power of printed output than any other comparable business computer system. In addition to the 60 to 100 lines-per-minute printer which is part of every System 1100 and 1200, you can have printers that range in speed up to 1800 lines-per-minute.

Each of the QANTEL printers is fully buffered, permitting data transfer to occur at electronic speeds without being held up by printer or operator speeds.

For moderate volumes of multi-part forms and reports, QANTEL's 60 to 100 lines-per-



minute printer is often adequate. For doubled output requirements or faster turnaround times, a QANTEL printer with rated speeds up to 300 lines-per-minute is also available. And for large volumes of forms, reports and documents with short leadtimes, two other high-speed line printers are marketed: the first with a range of 245-1100 lines per minute; and the second with a range of 700-1800 lines per minute, and any combination of two printers can be driven by the Systems simultaneously.

### Expanded Memory

Memory expansion is easy with a QANTEL System.

Both the QANTEL Systems 1100 and 1200 have the capacity for additional memory. Each QANTEL System is initially sold with a minimum of 4K bytes of user memory, plus an area of dedicated and protected memory for its efficient and easy-to-use software system. You can add user storage in 4K increments up to a maximum of 8K user memory with System 1100 or 16K with System 1200, and disc storage can be used as an extension to user memory.

powerful





### BEST for business ...

QANTEL Systems 1100 and 1200 operate under the control of BEST (Business Executive System for Timesharing) to provide full support to both the developmental and operational cycles of the business computer.

BEST is a disc-resident operating system which makes multi-programming easy to use and understand, and which offers a unique combination to accomplished computer personnel.

It's truly the most powerful Disc and File Management System available to the users of small business computers today, including:

- on demand dynamic disc allocation;
- tree structured, keyed data files for efficient direct or sequential record access;
- directly addressable sequential data files;
- and system supported automatic blocking of small records in all data files.

A memory optimizing multi-user executive, capable of deciding for itself the most efficient combination of:

- memory resident user programs;
- public or multi-user access to a single memory resident program; and
- memory extension through the use of disc as an alternative media.

A powerful, interactive programming language (QIC) to facilitate convenient program preparation.

Program execution from compiled machine code at optimum speed, apart from the compiling and debugging environment.

### QIC for business ...

Here is a true high-level programming language, designed specifically to complement the QANTEL Systems, and to provide optimum support for commercial applications.

QIC (QANTEL Interactive Code) is a source programming language that documents itself: it permits the representation of variable data elements by meaningful terms,

AMOUNT            ONHAND  
NETPAY            BALFORWD;

the instruction set consists of self descriptive English language terms,

GOTO            READ  
PRINT            STOP; and

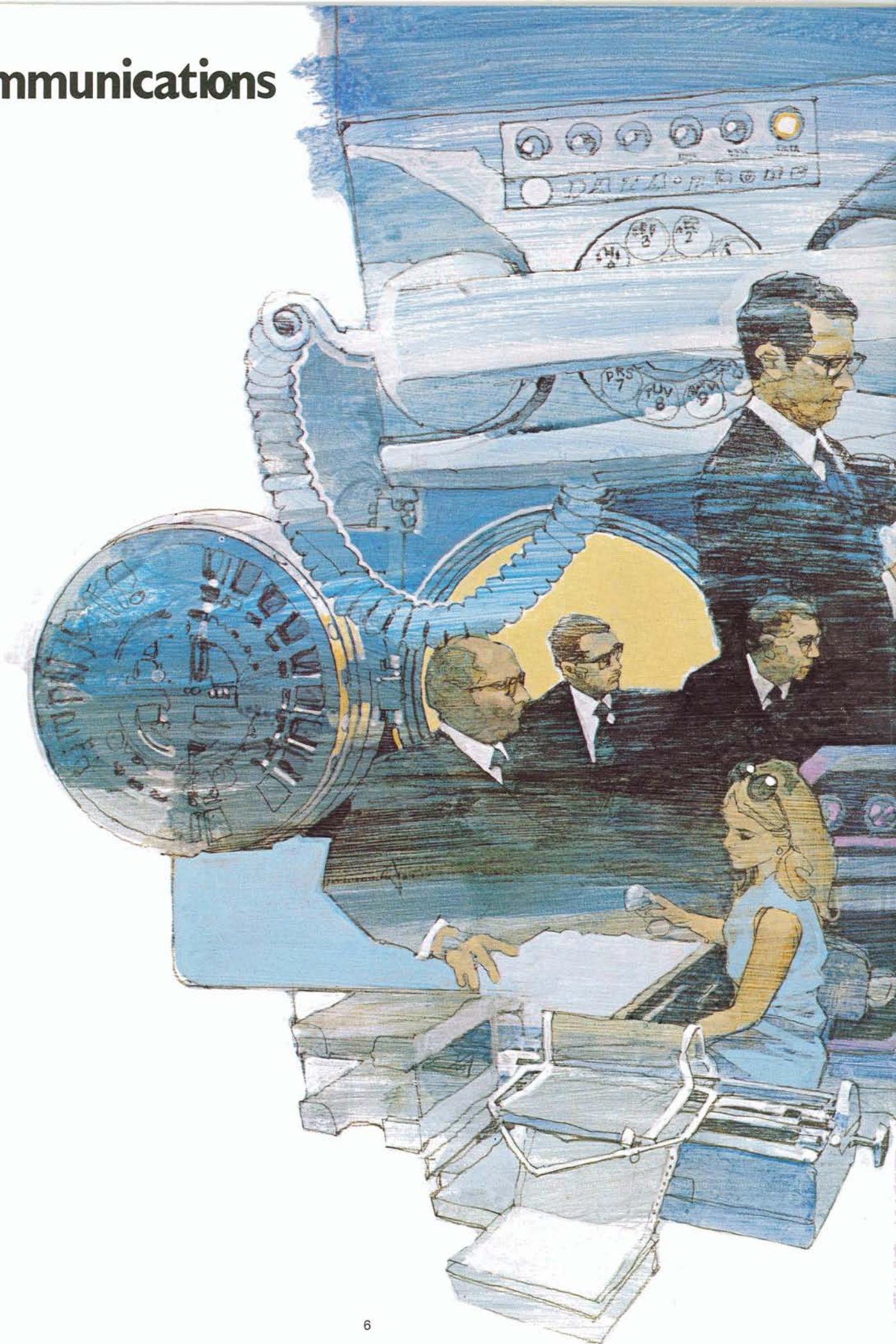
with QIC, program development becomes a true exercise in logic, as shown by the following example:

```

•
•
100 INPUT QTYORDER
   IF QTYORDER>ONHAND GOTO 200
   ONHAND=ONHAND-QTYORDER
   PRINT "CONFIRMED"
•
•
   GOTO 100
200 SHIPPED=ONHAND
   ONHAND=ZERO
   BACKORDR=QTYORDER-SHIPPED
   PRINT"QUANTITY SHIPPED", SHIPPED
   PRINT"BACK ORDERED", BACKORDR
•
•
   GOTO 100
•
•

```

# communications





If all the activities of your business are confined to one location—you may not need data communications. But if you need to gather information from remote sites, or exchange data with other computer systems, QANTEL Systems 1100 and 1200 can handle it. QANTEL's communications specialists have done it before—in a wide variety of applications.

The solution to your communications needs is simplified by an approach that takes advantage of equipment featuring the same unique flexibility and modularity that is provided by other QANTEL System components.

The key to QANTEL's communication capabilities is a micro-processor which enables unusually efficient performance

in sophisticated applications with a minimum impact on the operations of the System.

This communications micro-processor also allows a modular structuring of the software. Large portions of the software are standardized to supply the three commonly used communications capabilities: single-line synchronous or asynchronous and multiple line (multiplexed) asynchronous.

The software required to meet your particular needs and environment is then more easily developed and interfaced to the standard communications software. In fact, because of our broad experience in the field, your needs may have already been met in similar situations.

All of the QANTEL communications controllers can provide auto-call and auto-answer capabilities to simplify operator procedures and to provide completely unattended operation. Data can be transmitted and received over a wide range of speeds and formats to meet the requirements of other manufacturers' equipment and to give you the most reliable and economical communications available.

# selectivity

## Disc Drives

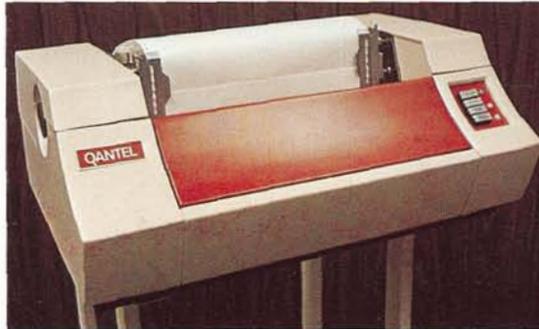


QANTEL Model 3001 Disc Drive provides six million characters of data storage: three million removable for off-line storage, and three million for fixed information. Model 3101 provides 12 million characters of data storage, six million fixed and six million removable.



QANTEL Model 3201 Disc Drive provides 30 million characters of quickly accessible data storage. Four Model 3201 Disc Drives can be supported by Systems 1100 and 1200, giving up to 120 million characters of disc storage.

## Printers



Model 5001 Serial Printer is standard on every System 1100 and 1200. It prints at 60-100 lines per minute and is fully buffered.



Model 5041 Line Printer prints at rates up to 300 lines per minute and is also fully buffered. One additional line printer can be connected to Systems 1100 and 1200.

## Terminals



QANTEL Model 4001 Video Terminal features a 960-character screen, extra large characters (upper and lower case), automatic right-justification of numeric entries and a familiar typewriter keyboard, plus a numeric-key cluster. Automatic polling and response capabilities are standard.



QANTEL's Model 4011 Video Terminal has all the features of the 4001 Video Terminal plus a large, 1728-character screen. The Video Terminals all have the capability of communicating with the computer via telephone lines.

## Other Devices



QANTEL's Magnetic Tape Units accommodate nine-track industry-compatible tapes. Models 5201 and 5202 record at 800 BPI and transfer data at 20,000 CPS. Models 5211 and 5212 record at 1600 BPI and transfer data at 40,000 CPS.



QANTEL Model 5301 Card Reader reads standard 80-column punched cards at a rate of up to 500 cards per minute, for users who already have a card-based system of data storage.

## overview

QANTEL Corporation is a manufacturer and marketer of business computer systems. Founded in 1969, the company has sold and installed business computer and data communications systems throughout the United States.

In addition to sales offices in the New York, San Francisco, Los Angeles, and Chicago areas, QANTEL has a network of distributors, dealers and agents marketing QANTEL equipment nationwide. Canada, Europe and the Far East are also represented by distributors.

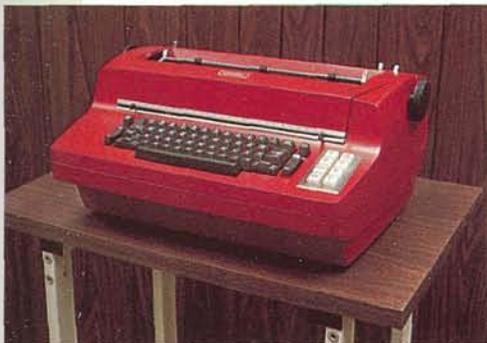
Service and repair are functions of QANTEL's own specially trained corps of field engineers, strategically located in major metropolitan areas throughout the Nation and supplying service in 30 States.

QANTEL has its own staff of software experts in its Hayward headquarters and field sales offices, in addition to national relationships with a wide variety of software and programming companies.

**QANTEL**  
CORPORATION  
Business Computer Systems



Models 5021 and 5031 are both variable speed line printers, functionally different only in their high rates of printing speed. Model 5021 can print 245 to 1100 lines per minute, and 5031 can output at 700 to 1800 lines per minute.



QANTEL Model 4201 Selectric Terminal transmits data to and receives data from the computer, typing out data at 15 characters per second.



QANTEL's 10-key console is a desk-top device with an adding machine keyboard configuration, used for entry of numeric data only.

