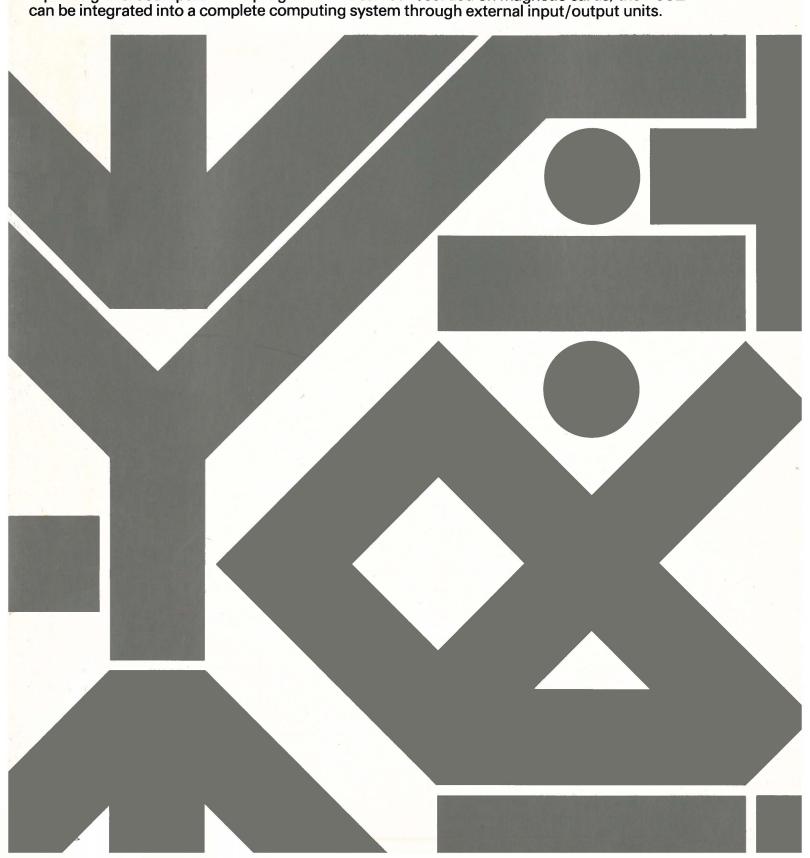
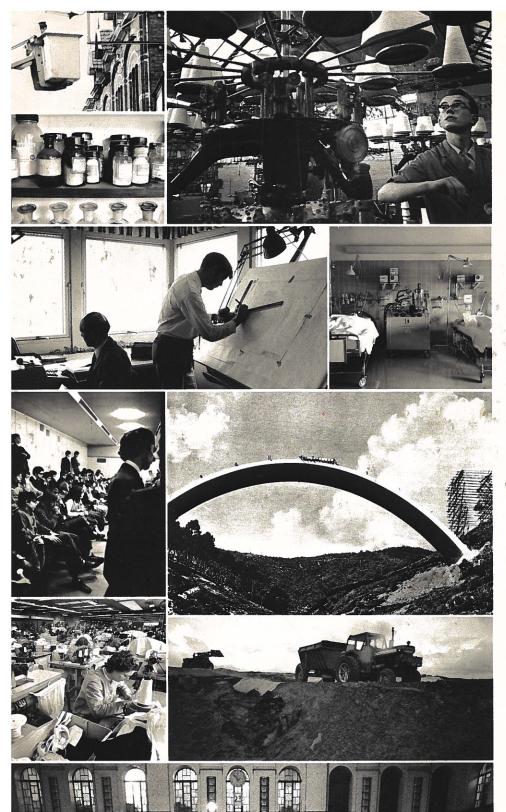
OLIVETTI P602 MICROCOMPUTER

The Olivetti P602 is a new microcomputer designed for the broad range of problems in scientific, technical, statistical and commercial computation.

Olivetti has been the leader in the microcomputer field since its inception. It was the Olivetti Programma 101, in fact, that created and established the new market for microcomputers in 1965. And today more than half the microcomputer users in the world are Olivetti customers.

A printing microcomputer with programs that can be recorded on magnetic cards, the P602 can be integrated into a complete computing system through external input/output units.





APPLICATIONS

Any problem that can be analyzed and formulated in mathematical or statistical terms

BASIC

Numerical Analysis Statistical Analysis Mathematical Function Evaluation

MEDICINE

Clinical Chemistry-Pathology Hematology Nuclear Medicine Cardiovascular Function Cardiopulmonary Function Microbiology Statistical Analysis Dose-Response and Probit Analysis

BANKING AND FINANCE Investment Banking Credit Unions

Tax Computations Cash Flow Installment Loans

MANUFACTURING AND CONSTRUCTION TRADES

Stress Analysis
Estimating
Steel Detailing
Hydraulics
Pressure Vessel Sizing
Sheet Metal Fabricating
Shop Planimetry
Quality Control
Spring and Gear Design
Chromatography
X-Ray Spectroscopy

CIVIL ENGINEERING

Surveying
Real Estate
Road Building
Cartography
Geodetic Surveying

AEROSPACE AND INDUSTRIAL RESEARCH

Metallurgy Chemical Engineering Function Evaluation, Curve Fitting

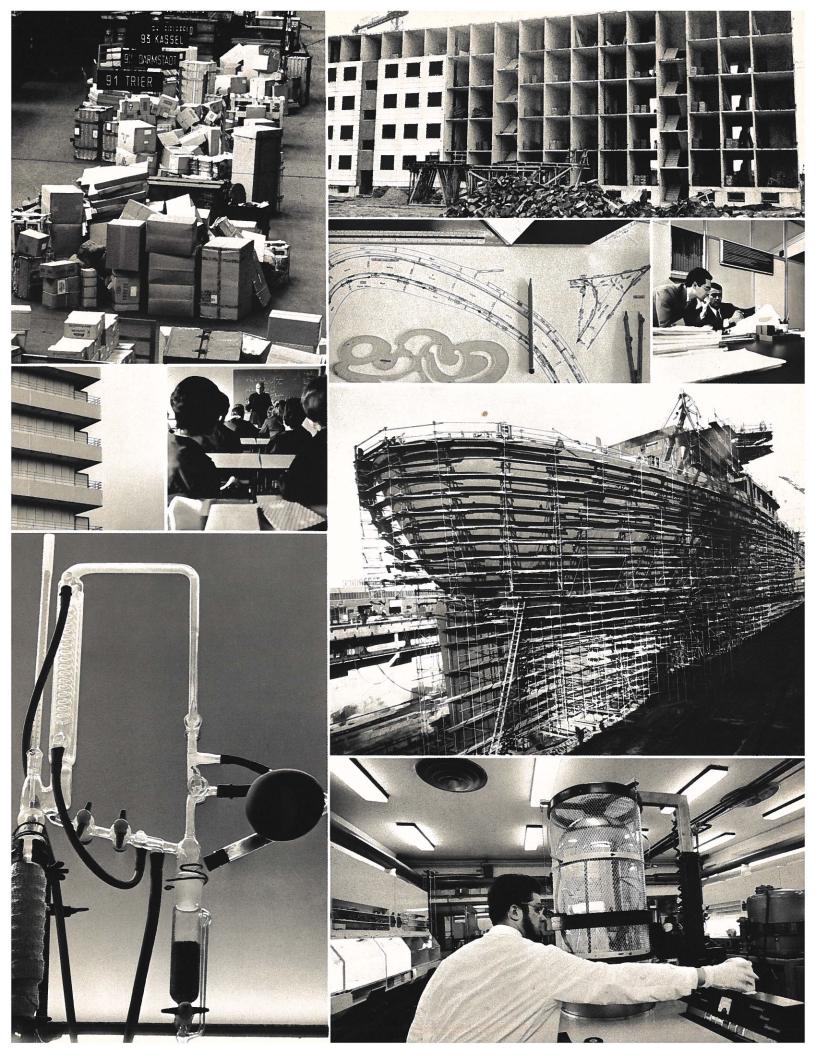
EDUCATION

Remedial Math School Mathematics of all grades Recreational Mathematics-Computer Games Science and Engineering: Biological Modeling Statistical Modeling, Structural Geology Computer Science

ECOLOGY AND ECONOMIC ANALYSIS

Watershed Planning Market Research Media Research Price Analysis

BUSINESS CONTROL Inventory Control Sales Forecasting



MAIN MEMORY
Large capacity and flexibility,
384 program instructions,
9 storage registers
containing up to 30 digits
divisible into two, three or four parts

The main memory of the Olivetti P602 is comprised of 16 registers, 3 of which are operating registers, 9 are storage registers and the remaining 4 are used for program instructions. Eight of the nine storage registers may contain either data or instruction, or both. Each register has a capacity of 30 digits for numeric data, or 32 positions for program instructions. Each storage register is divisible in half or quarter parts with corresponding capacities of 15 and 7 digits respectively. Program capacity ranges from 128 instructions with 36 (7digit) storage registers to 384 instructions with 4 (7 digit) storage registers. An exclusive Olivetti feature permits 100% memory utilization by enabling both data and instructions to be stored in the same register or even quarter part of a register.



READ-ONLY MEMORY 14 pre-programmed routines, called when desired

The additional read-only memory contains pre-programmed routines, for trigonometric, exponential, logarithmic, and floating point calculations. These routines may be called either manually by means of the keyboard or automatically by program, as required.

INDIRECT ADDRESSING A typical function of large computers provided in a microcomputer

All storage registers of the Olivetti P 602, may be indirectly, as well as directly, addressed. That is, the numeric contents of any register (including operating registers) may be used as the effective address of the register to be used in the operation.

This feature, typically found in large computers, provides an enormous increase in program logic capability, often a great savings in program instructions.

PROGRAM LOGIC Unconditional jumps, conditional jumps, sense switches, subroutines: logical power to an exceptional degree

JUMPS The Olivetti P 602 has 32 jump instructions.



These can be either unconditional or conditional. Conditional jumps will take place under the following program conditions:

- 1: Contents of A greater than zero.
- 2. Contents of A equal to zero.
- 3. Sense switch on (three independent sense switches are provided).
- 4. External unit condition.

CREATING SUBROUTINES

When a sequence of instructions is required at more than one point in a program, a subroutine may be created and "called" whenever desired. After performing the subroutine sequence the P 602 returns to the main program at the point immediately following the position of the subroutine call. Subroutines may also be "nested": one subroutine may "call" another.

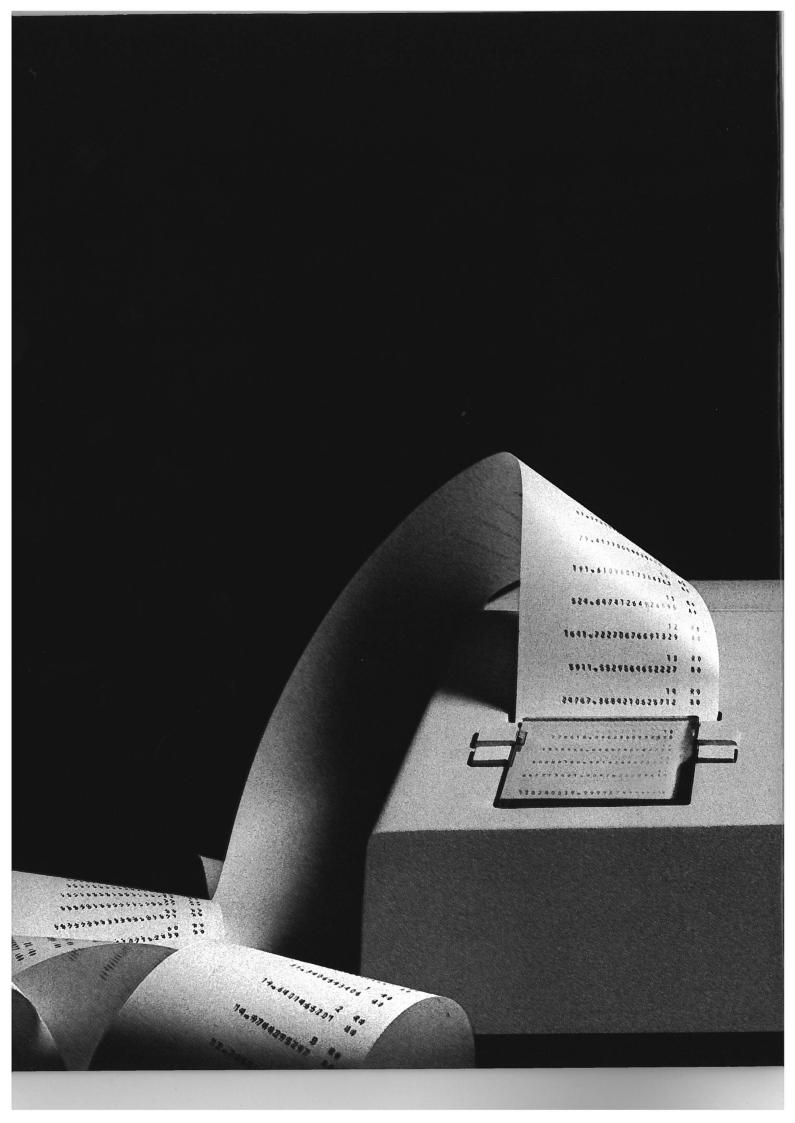
DATA REPRESENTATION Fixed and floating point calculations

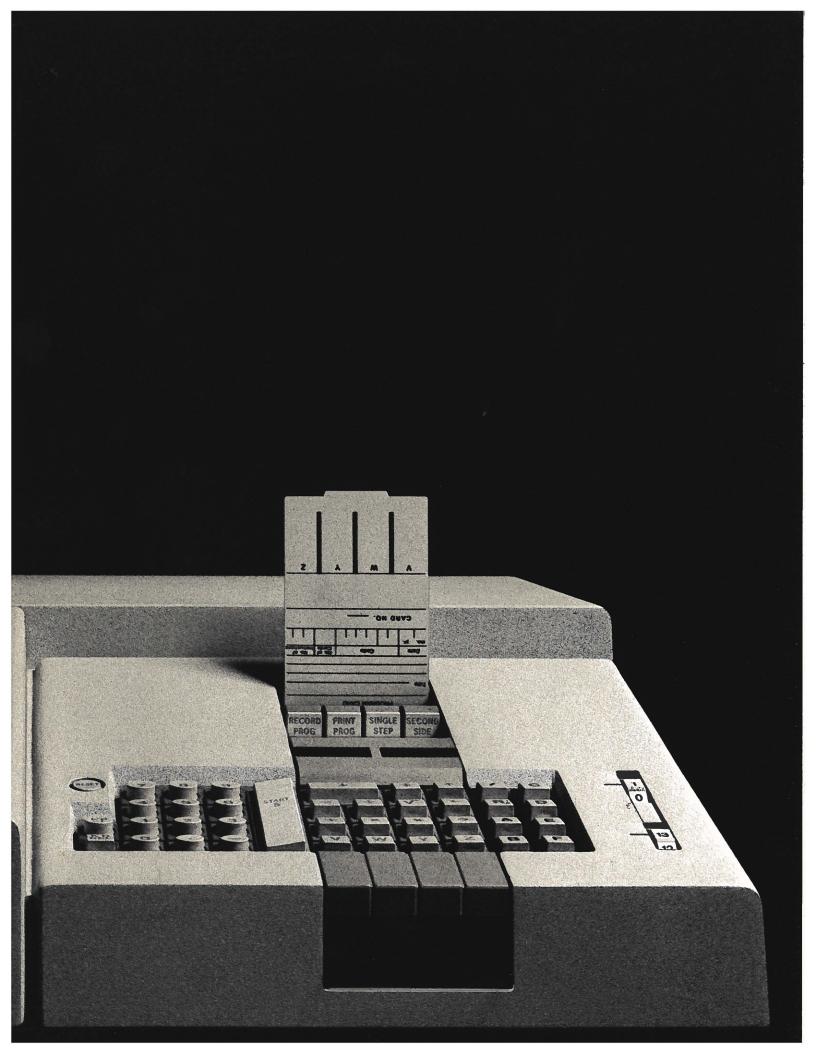
The Olivetti P 602 performs both fixed and floating point calculations. In fixed point, calculations with a maximum of 26 decimal digits may be performed. In floating point, the P 602 can handle numbers of very large or very small magnitude, due to its ability to express numerical data in scientific notation.

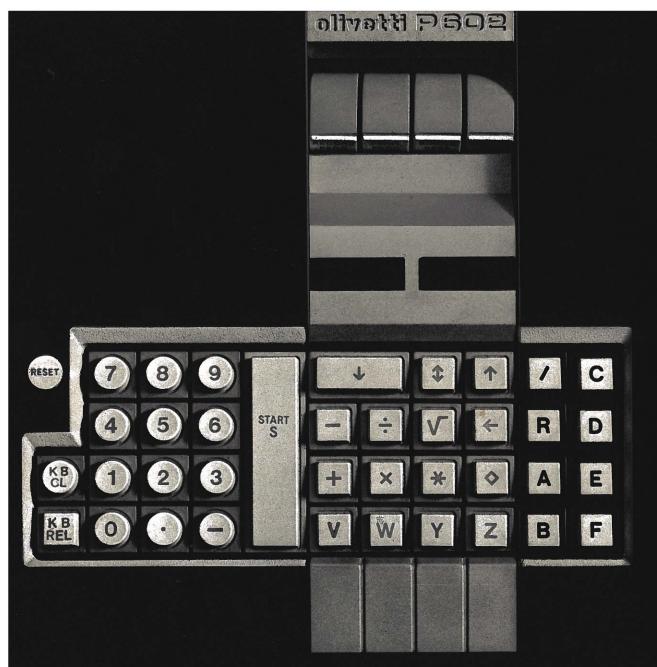
A unique feature permits calculation in a fixed field of 15 significant digits when desired, in contrast to the usual manner of pre-setting the number of decimal places.

PRINTED OUTPUT a permanent record

The P 602 is equipped with a serial printer, which operates at a speed of 30 characters per second. It prints all keyed input and results of calculations from any register whenever desired, including decimal point, sign, register identification, and instruction symbols.







KEYBOARD GROUPS

- 1. Numeric keyboard for entering data plus decimal point and algebraic sign.
- Function keys for executing arithmetic, transfer, printing, clearing, and input/ output operations.
- Keys for addressing registers and programming jump operations.

A SIMPLIFIED KEYBOARD Keyboard language simplicity in programming even the most complex problems

The keyboard reflects the operational simplicity of the microcomputer. Even the most complicated calculations can be programmed with a sequence of keyboard instructions: the language of the machine is comprised of a few immediately recognizable symbols on the keyboard. Programming does not require the use of any code translation chart. Anyone can learn to operate the P 602 in a few minutes and learn to program it in a few hours.

MAGNETIC PROGRAM CARDS Instant and permanent recording of any program

Programs created from the keyboard may be recorded on magnetic cards for external storage. By simple insertion of the magnetic program card, the microcomputer is instantly programmed with the desired instructions, constants and data.

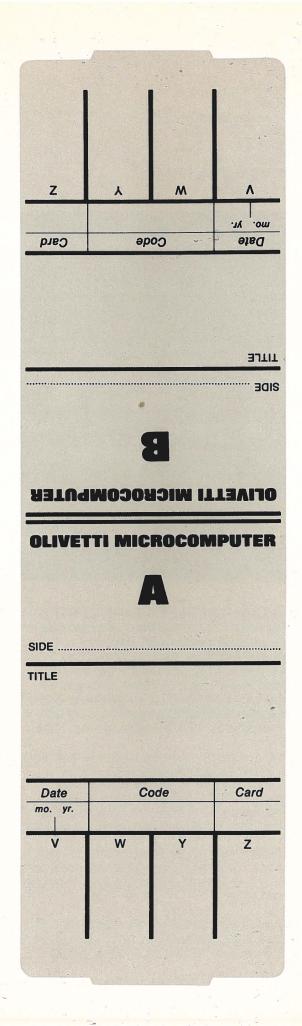
A file of magnetic cards with readymade solutions for repetitive or unusually complex problems provides an information system that is always immediately available for use.

SOFTWARE

Olivetti supplies a General Reference Manual and Self Instruction Text to enable the user to create his own custom designed programs. In addition, Olivetti has at the disposal of its users an extensive set of software volumes covering Numerical Analysis, Statistical Analysis and Mathematical Subroutines, and application packages in vertical markets such as surveying, financial, commercial.

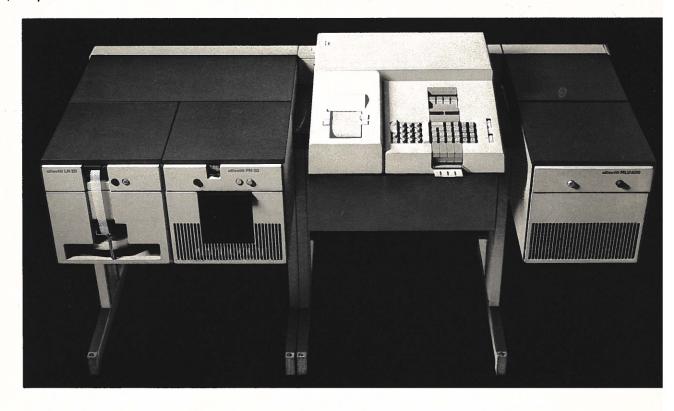
SINGLE STEP DEBUGGING, AND PROGRAM MODIFICATION Checking and changing programs instantly step by step

The P 602 microcomputer is able to print and/or execute a program in single step mode. In this manner, it is possible to verify the program by checking each separate instruction. In addition, any of the instructions may be replaced with either another instruction or block of instructions without having to re-enter the entire program.



INPUT/OUTPUT CONNECTIONS A microcomputer that can be integrated into a system

The Olivetti P 602 is not only an independent and self contained microcomputer, but also can be used as the central unit in a more sophisticated system. In fact it can handle both numeric and alphabetic information when used in connection with external input/output units.



MLU600 MAGNETIC TAPE CARTRIDGE The MLU600 magnetic tape cartridge provides random access memory for numeric data and programs. This unit constitutes an auxiliary memory of exceptional capacity that offers a maximum of 28,672 characters. The magnetic recording surface is on an endless loop of 7 track magnetic tape.

The magnetic tape cartridge is available in three different capacities, varying according to the length of the tape. They are 224, 448 and 896 registers, equivalent to 7,168, 14,336 and 28,672 positions for data or program instructions.

LN20 Punch Tape Reader allows data or instructions previously recorded on punched tape to be introduced into the computer.

The LN20 Reader when connected to the P 602 reads tape punched in 8-bit ISO code. (7 bits plus one for parity).

PN20 TAPE PUNCH
The PN20 tape punch when connected
to the P 602 provides a punched paper
tape for data or instructions in 8-bit ISO code.

XY PLOTTER

The P 602 may be connected to an xy plotter for the simultaneous production of graphs as well as numeric data.

SCIENTIFIC MEASURING INSTRUMENTS
The Olivetti P 602 can be connected to scientific measuring instruments for on-line data processing.

TECHNICAL SPECIFICATIONS

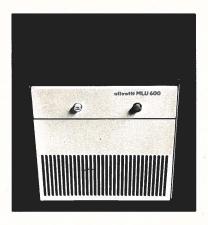
P 602

Electrical Specifications Single phase motor: 110 V Frequency: 60 cycle

No special air conditioning is required

Dimensions

Width: 18-1/2 in. Height: 7-1/2 in. Depth: 20-1/2 in. Weight: 73 lbs.



MLU600 MAGNETIC CARTRIDGE



LN20 PAPER TAPE READER



PN20 TAPE PUNCH

MLU600 MAGNETIC CARTRIDGE

Electrical Specification Voltage: 110 V 60 cycle

Dimensions
Width: 12 in.
Height: 12 in.
Depth: 12 in.
Weight: 51 lbs.

LN20

PAPER TAPE READER

Electrical Specification Voltage: 110 V 60 cycle

Dimensions
Width: 12 in.
Height: 12 in.
Depth: 12 in.
Weight: 46 lbs.

PN20 TAPE PUNCH

Electrical Specification Voltage: 110 V 60 cycle

Dimensions
Width: 12 in.
Height: 12 in.
Depth: 12 in.
Weight: 53 lbs.

