# SERIES 8000
# SERIES 5000

## Micro Computers From
## INDUSTRIAL MICRO SYSTEMS



Series 8000 Desk System with
Model 16 Hard Disk Subsystem

# SERIES 8000: SYSTEMS WITH TIME PROVEN COMPONENTS

A chain is only as strong as its weakest link, and any system is only as good as its individual components.

Because of the way they have been developed, you won't find any weak links in the systems made by Industrial Micro Systems. They have evolved. And evolution means survival of the fittest components.

From our popular static RAM boards to our floppy disk sub-systems, IMS quality components have been used for years in thousands of systems by many well-known companies around the world.

With the development of our Z80 CPU, I/O Cards and DMA double-density floppy disk controller, IMS components have evolved into microcomputer systems. Thus, our systems inherit the Industrial Micro Systems' quality and built-in, field-proven reliability of their components.

The attractive packaging of these components is also designed and manufactured by Industrial Micro Systems from rack mount to table top to desk systems---so we can attest to their utility and durability.

We are proud of the Series 8000's heritage of quality, reliability, and durability, and we have put it to good use in hundreds of systems installations throughout the world.

# SERIES 8000 SPECIFICATIONS

## Power:
☐ 120V ± 10%, 60 HZ
☐ 220V ± 10%, 50 HZ

## Environmental:
☐ 40°F - 115°F
☐ Relative Humidity 20% to 80%

## Bus Type and Capability:
☐ S100 Bus with 12 slot motherboard.
☐ 18A at +5V available.

## CPU Type:
☐ Z80A with 4MHZ Operation.

## Memory Type and Capability:
☐ 8-bit Static or 8-bit plus parity Dynamic RAM from 32Kb to 256Kb using 16K, 32K, or 64K memory boards.

## Floppy Disk:
☐ DMA, IBM format compatible, double density controller. 8'' drives, single or double sided, 500 Kb (double density) storage per side. Controller software selectable for single or double density operation. Maximum of three drives in desk system (two in table top system).

## I/O:
☐ Two RS232 serial, one parallel port standard. Expandable in two serial and one parallel, or four serial (RS232) port increments. Baud rate selectable under program control for 300 baud to 9600 baud (19.2kbaud optional).

## Hard Disk:
☐ Optional hard disk subsystem provides 32, 64, or 96 Megabytes of storage. Subsystem includes 16 Megabyte removable disk pack for ease of data backup and archival storage.

## Terminal Interface
☐ Interfaces to most major CRT's via RS232 port at up to 19.2K baud (9600 baud standard). Interfaces to most major printers via RS232 port or parallel port.

# STILL TO COME

Industrial Micro Systems will continue to develop additional innovative and useful hardware and software components for the Series 8000 systems. Among the capabilities for later implementation are:

☐ Telecommunications Capabilities
☐ Computer to Computer Networking
☐ Additional Languages
☐ Low Cost 8 Inch Winchester bulk Storage
☐ Process I/O Capabilities



Series 8000
Table Top Computer

INDUSTRIAL MICRO SYSTEMS

## SERIES 8000 SOFTWARE

The Industrial Micro Systems Series 8000 includes an impressive array of software tools. Operating systems (both single-user and multi-user) and language processors are availabe from Industrial Micro Systems providing users with the software development capabilities previously found only in much larger computer systems. Software available with the Series 8000 is described below:

## OPERATING SYSTEMS

The operating systems available from Industrial Micro Systems include the industry standard CP/M *, multi-user MP/M* and MVT-FAMOS*, MICROCOBOL*, and UCSD PASCAL*.

### CP/M

CP/M is a general purpose operating system using standard IBM format soft-sectored diskettes. Hard disk drives are also supported. CP/M's basic facilities include dynamic file management, a fast assembler, a general purpose text editor, and an advanced debugger. Several high-level languages are available for use under CP/M including CBASIC*, Microsoft BASIC*, Microsoft FORTRAN*, and Microsoft COBOL*. There is also a large array of applications packages available under CP/M.

### MP/M

MP/M is a multi-user version of CP/M. It provides multi terminal support and multi-programming at a single terminal. It has the ability to operate in sequential, polled, or interrupt driven environments. It has been developed to utilize the vast library of existing software that runs under CP/M.

### MVT-FAMOS

MVT-FAMOS is a multi-user, multi-tasking operating system that provides advanced operating system features such as Indexed Sequential Access Method (ISAM) file management, terminal to terminal file security, and intersystem communication.

### MICROCOBOL

MICROCOBOL is a language and operating system for the development and running of COBOL programs. It includes the MICROCOBOL compiler, interactive text editor, and linker and subroutine library. Also available is a powerful file management and report generation program called Autoclerk

**Model 16 Hard Disk Subsystem • Cover Open**



## MODEL 16 HARD DISK SUBSYSTEM

The Industrial Micro Systems Model 16 Hard Disk Subsystem is a "fixed-removeable", high-speed, bulk storage device, that provides its own back up capability.

The Model 16 includes a 16 megabyte SMD technology cartridge and a 16, 48, or 80 megabyte fixed media that employs Winchester 3340 technology. It also includes the Model 490 Hard Disk Controller, credenza enclosure, cabling and disk pack for the most complete and attractive large storage capability available.

The interface between the hard disk drive and the series 8000 is provided by the one board controller (Model 490) in the Series 8000. Data transfer may be either Direct Memory Access (DMA) or Programmed I/O (PIO). Operation using DMA uses a DMA port on the floppy disk controller in the series 8000. Maximum transfer rate is 1.2 megabytes per second. The controller fully buffers the data transfer to and from the disk. The buffer is 1k bytes and loads one disk sector (512 bytes) plus header and error checking (CRC) information.

# SERIES 8000
# SERIES 5000

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Series 8000 Table Top with WP2000 CRT

### SEE YOUR DEALER

Industrial Micro Systems manufactures a full line of S-100 micro-computer products. Included are 8K, 16K, 32K, and 64K memory boards, disk drive enclosures, the Series 8000 and Series 5000 microcomputer systems and many others. Your local microcomputer dealer has all the information. Or contact Industrial Micro Systems at the address below.

**Distributed By:**

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