

# Data General Desktop Generation



*A single Desktop Generation system can act as a workstation in any Data General network, providing users with a window in an integrated corporate systems environment. As an independent professional workstation, the Desktop Generation provide users with personal processing power and storage.*

## BACKGROUND INFORMATION

*Data General Corporation, 4400 Computer Drive, Westboro, MA 01580. Telephone (617) 366-8911.*

Founded in 1968, Data General designed and marketed its first small computer—the Nova. A Fortune 500 company with over 125,000 computer systems in use, Data General is the second largest small computer manufacturer. Data General's philosophy is to ensure the compatibility of its products—past, present, and future.

Data General's product line consists of the 16-bit Nova, Eclipse, and MicroNova families, the 32-bit Eclipse MV/family, operating systems, communications, networking, office automation software, and interfaces and protocols for IBM compatibility, as well as an extensive range of services and support. The company's latest offerings include the 16-bit Desktop Generation computers.

## SYSTEM CHARACTERISTICS

The Data General 16-bit desktop computers are representative of the Desktop Generation Series. The modular units are designed to snap into place for quick, easy installation. This snap-together modularity provides flexibility in system configuration, expansion capabilities, and maintenance procedures.

**Current models:** 10, 10/SP, 20, 30.  
**Memory:** 128KB-1536KB (1.5MB) RAM.  
**Storage capacity:** 368KB-736KB diskettes; 15MB-30MB hard disk.

**Workstations:** multi-user.

**Base list price:** 10 (Entry Level System)—\$3,165, includes CPU, 128KB RAM, CRT, keyboard, diskette; 10 (Office Automation Personal Computer)—\$5,430, includes CPU, 256KB RAM, CRT, keyboard, diskette, multiplexer, software; 10/SP (CEO Workstation)—\$9,660, includes CPU, 512KB RAM, diskette, 15MB hard disk, multiplexer, monitor; 10/SP (Engineering Workstation)—\$12,760, includes CPU, 768KB RAM, diskette, floating point processor, 15MB hard disk, monitor, keyboard, mouse, software; 20 (Small Business System)—\$10,640, includes CPU, 256KB RAM, diskette, 15MB hard disk, multiplexer, terminal, printer, software; 20 (CEO Office Automation Cluster)—\$16,160, includes CPU, 1MB RAM, diskette, 15MB hard disk, multiplexer, terminals, printer, CEO; 30 (Technical/Computational System)—\$17,030, includes CPU, 1MB RAM, floating point processor, terminal, multiplexer, 15MB hard disk, diskette, printer, software.

**Typical list prices:** 10 (Entry Level System)—\$3,165, same as base configuration; 10 (Office Automation Personal Computer)—\$5,430, same as base configuration; 10/SP (Comprehensive Electronic Office—CEO Workstation)—\$9,660, same as base configuration; 10/SP (Engineering Workstation)—\$12,760, same as base configuration; 20 (Small Business System)—\$10,640, same as base configuration; 20 (CEO Office Automation Cluster)—\$16,160, same as base configuration; 30 (Technical/Computational System)—\$17,030, same as base configuration.

**Popular options:** from Data General—card expansion, hard disks, cartridge tape modules, plotters, displays, I/O devices.

**Principal programming languages:** Cobol, Pascal, Fortran-77, Basic.

**Principal applications software:** word processing, database management, communications, accounting, data management, electronic spreadsheet.

**First shipment:** July 1983.

**Number installed to date:** information not available.

**Available through:** Data General sales offices and distributors in the U.S., Canada, and over 50 foreign countries.

The Desktop Generation includes: Model 10 entry level system, with 128KB RAM, single diskette, monochrome monitor and keyboard, or Model 10 Office Automation Personal Computer with 256KB RAM, single diskette, monochrome monitor and keyboard, and single line multiplexer; Model 10/SP Comprehensive Electronic Office (CEO) workstation, containing 512KB RAM, single diskette, 15MB Winchester hard disk, monochrome monitor and keyboard, and single line multiplexer, or Model 10/SP Engineering Workstation, containing 768KB RAM, single diskette, floating point instruction set, 15MB Winchester hard disk, 13-inch color monitor and keyboard, and mouse data input device; Model 20 Small Business System, with 256KB RAM, single diskette, 15MB Winchester hard disk, four line multiplexer, Dasher D210 Terminal, and correspondence quality printer, or Model 20 CEO Office Auto- ➤

## Data General Desktop Generation

▷ mation Cluster, consisting of 1MB (1024KB RAM), single diskette, 15MB Winchester hard disk, four line multiplexer, three Dasher D210 terminals, and correspondence quality printer; and the Model 30 Technical Computational System, configured with 1MB (1024KB RAM), floating point hardware, Dasher D460 Terminal, four line multiplexer, 15MB Winchester hard disk, single diskette, and multifunction printer.

The 10 and 10/SP models feature two microprocessors: Data General's microEclipse and the Intel 8086. It can execute programs written for Data General operating systems, as well as programs written for CP/M-86 and MS-DOS operating systems. The Model 20 is microEclipse-based and can run Data General's AOS, RDOS, and MP/AOS-SU operating systems. The Model 30 incorporates a floating point processor which enables the system to perform mathematical calculations.

Data General offers the Dasher series add-on display terminals: D210, D211, D410, and D460. Features of the terminals include: a 12-inch monochrome monitor, or a 13-inch color monitor; non-glare and brightness control; tilt capabilities; high refresh rate to reduce screen flicker; blink, dim, underscore, and reverse video character attributes for highlighting or designing forms; multi-lingual display for international and multi-national applications; and a detached typewriter-style keyboard. In addition, the D210 and D211 terminals each incorporate a 96-character set and support international character fonts, as well as a number of screen facilities which enhance the manipulation and presentation of visual display information. Both D210 and 211 contain an integral EIA RS-232-C communications interface, and support RS-422 communications interface. The D410 and D460 display terminals include the major features of the D210 and D211 terminals, plus a 512 character set, word processing symbols, single and double thickness line drawing elements. Greek symbols, mathematical notations, Arabic numerals, and up to 24 user-defined display windows.

The low profile keyboard contains 107 sculptured keys arranged in four groups to eliminate errors and increase data entry. In addition, the keyboard consists of a screen management keypad used for special editing functions, numeric keypad, and function keypad.

The Desktop Generation computers also feature communications capabilities. A system can operate as an individual workstation or concurrently support up to four users. In another area, a system can be utilized as a stand-alone or as a node in a larger computer network.

Data General offers several graphics options for use in the business, technical, and computer-aided design (CAD) environment. The units support medium and high resolution monochrome and color graphics along with a data tablet mouse device for data input.

Data General offers a wide range of add-on peripherals and plug-in cards for use with the Desktop Generation computers. The peripherals allow customers to expand on-line

storage and system memory, enhance communications and graphics capabilities, as well as add I/O capabilities. These options include: a card expansion module, which increases the power of the CPU card module by providing slots for five additional I/O cards; a Winchester disk drive module which provides up to 15MB of on-line storage; a ¼-inch past cartridge tape module, which provides backup for on-line disk storage; and a desktop color plotter. Graphic options include: displays, subsystems, I/O devices, monitors, and terminals. Program development options consist of generators for various languages, a file tracking system, interactive debugger, microassembler, cross-development utilities, and programming interfaces. In addition, communications subsystems are also available for interconnectibility and include line interfaces, a communications multiplexer, and an IEEE-488 Bus Interface card.

Software available for the Desktop Generation computers consists of Data General's Comprehensive Electronic Office (CEO) System (word processing, spelling, electronic mail, administrative support, and decision support); Data General's EasyFamily Systems, which include EasyWriter and EasyWriter II, EasySpellerII, EasyFiler, EasyPlanner, and EasyBusiness (general ledger, financial reporting, accounts payable, accounts receivable, inventory control and analysis, and order entry). Additional offerings include: Multiplan, an electronic spreadsheet; WordStar, for word processing; and Condor I, a database management system.

Data General offers a choice of eight standard and extended warranties, as well as a toll free telephone hotline, to support the Desktop Generation computers. □

## HARDWARE

### PROCESSOR/MEMORY

Model: 10, 10/SP—DG microEclipse and Intel 8086 (16-bits, 5MHz); 20, 30—DG microEclipse  
RAM: 128KB-1024KB RAM

### DISPLAY

Model:	Dasher D210 D211	Dasher D410 D460
Screen size:	12-inch	13-inch
Chars./screen:	1920, 80 characters x 24 lines	1920, 80, 3240, 135 characters x 24 lines
Char. type:	96 ASCII (D210) ANSI x.364 (D211)	512 ASCII (D410) ANSI x.364 (D460)
Attributes:	underline, blink, dim, reverse	underline, blink, dim, reverse
Features:	non-glare, tilt, monochrome	non-glare, tilt, color
Graphics:	640 x 240 pixels	810 x 288 pixels
Interface:	integral RS-232-C	integral RS-232-C
Price:	included w/system	included w/system

### KEYBOARD

Type: detachable, typewriter-style  
No. of keys: 107 total, includes 14-key numeric pad, 20 function keys, 12 screen management keys, and 61 alphanumeric keys  
Interface: 2' coiled cable

## Data General Desktop Generation

### DIRECT ACCESS STORAGE

Model:	Data General Diskette	Data General Winchester
Type:	5¼" diskette	5¼" Winchester
Capacity/drive:	368.6KB (formatted)	15MB (formatted)
Drives/system:	up to 2	2
Avg. access time:	up to 249 milliseconds	—
Transfer rate:	250 KBS	—
Interface:	diskette controller card	disk controller card
Price:	included w/10, 10/SP	included w/20, 30

### PRINTER

Model:	Data General Multi-function Dot Matrix	Data General Data Processing Dot Matrix	Data General Letter-Quality
Type:	dot matrix	dot matrix	letter-quality
Paper:	continuous roll or fanfold; up to 15"	continuous roll or fanfold; up to 9"	cutsheets or continuous fanfold; up to 16"
Char. set:	optional	program switch or selectable	optional
Chars./line:	—	—	—
Speed:	160 cps	150 cps	35 cps
Interface:	RS-232-C	serial	RS-232-C
Price:	contact vendor	contact vendor	contact vendor

DATA COMMUNICATIONS: none specified

### OTHER I/O

Plotter: Data General Desktop Color Plotter  
 Magnetic tape: ¼" fast tape cartridge module

I/O ELECTRONICS: none specified

## SOFTWARE

### LANGUAGES

Basic: Basic, bundled with 20

Fortran: Fortran-77, bundled with 10/SP, 30  
 Other: Cobol; Pascal

### OPERATING SYSTEM

Name: 10—MP/AOS-SU, bundled; RDOS, bundled; CP/M-86, bundled; MS-DOS, bundled; 10/SP—ADS, bundled; MP/AOS-SU, bundled; RDOS, bundled; CP/M-86, bundled; MD-DOS, bundled; 20, 30—AOS, bundled; MP/AOS-SU, bundled; RDOS, bundled

### UTILITIES

Sort: SortMerge (10/SP, 20, 30), bundled; SortMerge w/report writer (30), bundled; CSSORT, bundled

### COMMUNICATIONS SUPPORT

Name: XAP, DG/GATE, Terminal Emulation, RJE80, X.25 Async, XODIAC  
 Functions: provides network protocols and management software, generates systems and/or Data General host minis, emulates IBM terminal, and transfers batch jobs to Data General or IBM 360/370-compatible host

Name: GPIB, XAP, DG/GATE, Terminal Emulation, RJE80

Functions: controls the IEEE-48 bus interface w/subroutines, transfers files, accesses public data networks, emulates Dasher series terminals, and transfers batch jobs

Name: GPIB, MP/RJE80

Functions: controls IEEE-488 bus interface, and transfers batch jobs

### APPLICATIONS PROGRAMS

Accounting: EasyBusiness  
 Data Management: EasyFiler  
 Electronic Spreadsheet: Multiplan; EasyPlanner  
 Word Processing: EasySpeller; EasyWriter; EasyWriter II; WordStar, bundled

## SUPPORT SERVICES

### DOCUMENTATION

Range: available, contact dealer for pricing

### SUPPORT

Training & education: Data General offers self-study, training center, or on-site courses  
 Maintenance: Data General offers 7 service options

### TERMS AND CONDITIONS

Warranties: a choice of 8 standard and extended warranties  
 Software terms: software subscription service; customer support telephone helpline ■