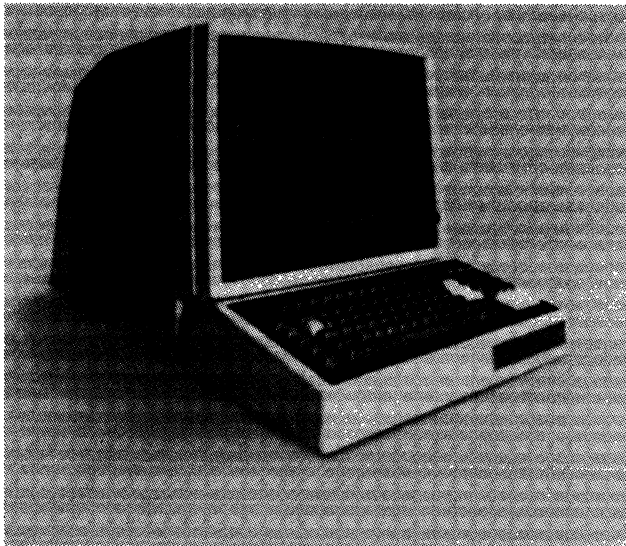


# Wordstream IBM 3270 Replacement Display Stations and Printers



## MANAGEMENT SUMMARY

The Wordstream Corporation (formerly Genesis One) offers add-on or replacement display stations and printers for the IBM 3270, 3790, and System/3 environments. The G77 Information Display Terminal and G Series Printers are plug-compatible replacements for IBM's 3277 Model 2 Display Station and 3284, 3286, and 3288 printers. The Wordstream display stations and printers can be connected to the IBM controller with existing IBM cables or with cables available from Wordstream. No hardware or software changes are required.

All current functions and capabilities of the IBM 3277-2 have been implemented in the G77. Wordstream has also added a few enhancements that give the G77 a slight edge over its IBM counterpart with respect to operating flexibility. One of the more significant enhancements (a no-cost option for applications such as text editing) is the capability to display true upper and lower case alphabets.

Because the G77 displays each character via a 5-by-7 dot matrix, it is reasonable to assume that its character clarity and sharpness (resolution) are somewhat less than that of IBM 3270, which uses a 7-by-9 dot matrix to form each character. This deficiency was quite apparent in the original models of the G77, but Wordstream has since alleviated the problem (without changing the character matrix) by refining the character generator. The G77 terminal now includes a new character generator and monitor; according to Wordstream, its display clarity is equal to that of the IBM 3277.

Wordstream offers five EBCDIC keyboards. Two 66-key data entry- and typewriter-style keyboards, a 78-key typewriter-style keyboard, and a 78-key console keyboard compare with IBM's EBCDIC data entry, typewriter, and ➤

Plug-compatible replacements for the IBM 3277 Model 2 Display Station and IBM 3284, 3286, and 3288 printers.

The G77 Information Display Terminal consists of a 1920-character display unit and a separate keyboard that is available in five styles. The G77 provides all the functions provided by the IBM 3277-2 plus a few enhancements.

The G Series Printers are available in three models with rated speeds of 88, 120, and 165 characters/second. All three models provide 132 print positions and a 64-character ASCII print set.

The G77 Display Terminal can be purchased for \$2,714. The separately priced keyboards cost \$326 or \$652, depending on the style selected. The G Series Printers range in price from \$3,680 to \$4,530. Two-, three-, and four-year leases are available.

## CHARACTERISTICS

**VENDOR:** Wordstream Corporation, a subsidiary of Management Assistance, Inc. (MAI), 300 East 44th Street, New York, New York 10017. Telephone (212) 557-3500.

**DATE OF ANNOUNCEMENT:** November 1974.

**DATE OF FIRST DELIVERY:** January 1975.

**NUMBER DELIVERED TO DATE:** 2500.

**SERVICED BY:** Sorbus, Inc., another subsidiary of Management Assistance, Inc.

## CONFIGURATION

The Wordstream G77 Information Display Terminal and G Series Printers are interchangeable replacements for the IBM 3277 Model 2 Display Station and IBM 3284, 3286, and 3288 Printers, respectively, on the IBM 3272 Model 2 Local Control Unit or the IBM 3271 Model 2 or 12 Remote Control Unit. The G77 display station can also replace IBM 3277-2 display stations on the IBM 3791 Control Unit (the controller for the IBM 3790 System) and on IBM System/3 computer models via the appropriate attachments.

## TRANSMISSION SPECIFICATIONS

Applicable to the IBM 3271 Model 2 and 12 and IBM 3791 control units. See IBM 3270 Information Display System and IBM 3790 Communication System, Reports C25-491-101 and C21-491-101, respectively.

## DEVICE CONTROL

The G77 terminal provides all the functions that are currently provided by the IBM 3277-2 Display Station, plus a few of ➤

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▷ console keyboards. An equivalent to the 78-key data entry keyboard offered by Wordstream is not available from IBM. Console arrangement, EBCDIC/APL, and ASCII keyboards are not offered by Wordstream. An optional numeric pad facilitates volume entry of numeric data.

Light pen and ID card reader, optional features for the IBM 3270, are also available from Wordstream.

The G Series Printers provide substantial increases in cost-performance over the IBM 40- and 66-cps printers. These printers, like the IBM printers, print up to 132 print positions and are equipped with 1920-character buffers.

### USER REACTION

Datapro's 1979 survey of alphanumeric display terminal users produced responses from 22 users who reported on their experience with 299 G77 display terminals. The ratings assigned by these users are listed in the table below.

	Excellent	Good	Fair	Poor	WA*
Overall performance	13	9	0	0	3.6
Ease of operation	14	8	0	0	3.6
Display clarity	16	6	0	0	3.7
Keyboard feel & usability	9	12	0	1	3.3
Hardware reliability	12	10	0	0	3.5
Maintenance service	8	11	3	0	3.0
Technical support	3	13	3	0	3.0

\*Weighted Average on a scale of 4.0 for Excellent.

Reported usage of the G77 terminals included "fill in the blanks" formatted data entry (17 responses), free-form (text) data entry (11 responses), and structured data entry (10 responses). Extensive editing was performed by 16 users.

The most frequently mentioned advantages of the G77 were low cost, mentioned by 19 users, and compact size, mentioned by 8 users. However, the size of the G77 was considered a disadvantage by six users. □

► its own. The added functions include a Home cursor control, an optional cursor blinking capability, Field Erase, Automatic Variable Initialization, and Character Repeat. The added Home key moves the cursor to the initial character position of the first unprotected field. When activated by the operator, the Automatic Variable Initialization function identifies variable fields by displaying a dot in each character position. The Character Repeat function permits any character to be repeatedly displayed.

The G77 is available with IBM-equivalent options. Extra-cost options include Security Lock, Audible Alarm, Light Pen, and ID Card Reader. The blinking cursor and numeric lock keyboard features are no-cost options.

### COMPONENTS

**DISPLAY STATION:** The G77 is composed of a display unit and a separate keyboard. The CRT display screen measures 14 inches diagonally and displays 1920 characters arranged in 24 lines of 80 characters each. The display arrangement is identical with that of the IBM 3277-2.

A character set of 96 characters, including upper and lower case alphabets, numerics, and special symbols (as compared with IBM's standard 64-character set), is displayed in green against a dark background, as in the IBM 3277-2. Unlike the IBM 3277-2, which forms each character via a 7-by-9 dot matrix, the G77 uses a 5-by-7 dot matrix.

The display unit measures 16½ inches wide by 15 inches high by 18.3 inches deep and weighs 57 pounds. Heat dissipation is 490 BTU/hr. By comparison, the IBM 3277 Model 2 measures 16 inches wide by 19 inches high by 21 inches deep and weighs 85 pounds. Its heat dissipation is 525 BTU/hr.

Five keyboards are available: a 66- or 78-key EBCDIC typewriter-style keyboard, a 66- or 78-key EBCDIC data entry keyboard, and a 78-key EBCDIC console keyboard. The 78-key keyboards include 12 Program Function keys; each of these keyboards is identical with its IBM counterpart. A 15-key numeric keypad is optional. The keyboard can be located up to 2 cable-feet from the CRT display unit.

The keyboards each measure 16½ inches wide by 3 inches high by 9½ inches deep and weigh 6 pounds. By comparison, the IBM 3277-2 keyboard measures 15¼ to 18 (78-key keyboard) inches wide by 4 inches high by 8½ inches deep and weighs 10 pounds.

**PRINTERS:** Three serial, impact printer models are available that differ in speed: Model G088, a Centronics 588 rated at 88 characters/second; Model G120, a Centronics 500 rated at 120 characters/second; and Model G165, a Centronics 501 rated at 165 characters/second. All models provide 132 print positions, a 64-character ASCII print set with options for 96 or 128 characters, and an adjustable tractor feed that will accommodate pin-fed, five-part, continuous forms from 4 to 14.9 inches wide. Printed characters are formed via a 9-by-7 dot matrix. Features include a 1920-character buffer, vertical format control (via a 2-channel paper tape loop), audible alarm, and automatic motor control. The audible alarm sounds when operator intervention is required such as when paper is depleted or the program signals attention. The automatic motor control disconnects the printer motor at a predetermined time after the last print operation. A Systems Available light, not provided in the IBM printers, indicates an on-line condition.

### PRICING

The G77 Information Display Terminal and G Series Printers are available for purchase or on a 2-, 3-, or 4-year lease, excluding maintenance.

Separate maintenance contracts for prime-shift (9 hrs./day, 5 days/week) are available for leased or purchased equipment. Installation charges are \$25 per display station and \$50 per printer. The investment tax credit is passed on to the customer at his request. Minimal training is provided at time of installation. The G77 terminal and G Series Printers are priced as follows: ►

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### Monthly Rental (1)

	<u>2-Yr. Lease</u>	<u>3-Yr. Lease</u>	<u>4-Yr. Lease</u>	<u>Purchase</u>	<u>Monthly Maint. (4)</u>
▶ G77 Display Unit (2)	\$101	\$ 89	\$ 85	\$2,714	\$13.50
Keyboards:					
66-key data entry	12	11	10	326	3
78-key data entry	24	23	22	652	5
66-key typewriter	12	11	10	326	3
78-key typewriter	24	23	22	652	5
78-key console	24	23	22	652	5
15-key Numeric Pad	9	8	7.50	233	1
Audible Alarm	3	2.50	2	110	N/C
Security Keylock	70 (3)	70 (3)	70 (3)	70 (3)	N/C
Selector Light Pen	28	27	26	867	1
ID Card Reader	Contact Vendor				
G Series Printers:					
Model G088; 88 cps	150	135	120	3,680 (5)	40
Model G120; 120 cps	160	145	130	4,240 (5)	40
Model G165; 165 cps	170	155	140	4,530 (5)	70

(1) Includes prime-shift maintenance.

(2) Does not include keyboard.

(3) Single-use charge.

(4) Prime-shift maintenance; full maintenance for 24 hours/day, 7 days/week is 40% higher.

(5) Price effective September 1, 1979.

N/C—No charge.

Cables are priced at \$11 per cable plus \$0.11 per cable-foot. ■

