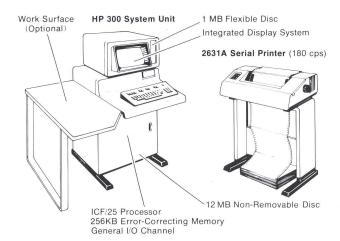




System Summary



The HP 300 Computer System is a high-capability, low-cost computer system designed for dedicated, on-line business data processing applications:

- "Large System" Capability. Powerful operating software and state-of-the-art hardware provide unprecedented capability in a small, integrated system.
- Sophisticated System Display. The HP 300 can present many different pieces of information simultaneously on its advanced display, providing unprecedented display capability and simplicity of system operation.
- Data Management. A comprehensive file management system and the Image/300 Data Base Management System offer a complete range of data management alternatives.
- Multiterminal Operation. The HP 300 supports up to 16 terminals, backed by a variety of applications structures for implementing efficient on-line applications.
- Interactive Software Development. Powerful programming tools and a unique on-line programming process simplify and streamline software development.
- **Dependability.** The HP 300 is designed to fit directly into the office environment, providing reliable, worry-free operation backed by a strong, worldwide support organization.
- Expandability. The HP 300 has dramatic growth potential in all dimensions with smooth, modular expansion.

Minimum System

Hardware

HP 300 Model A HP 300 System Unit including ICF/25 Processor Integrated Display System (IDS) 256 KB error-correcting memory General Input/Output Channel (GIC) for up to 5 additional devices

Integrated 12 Megabyte non-removable disc 1 Megabyte flexible disc HP 300 Model B Same as HP 300 Model A, but with external 10+10 Megabyte fixed/removable disc rather than integrated 12 Megabyte non-removable disc

Software

Amigo/300 Operating System
HELP (an on-line reference manual)
Typist (a text editor)
Sort/Merge
System Build (an interactive configurator)
Diagnostic/Utility System

Optional Products

Software

Business Basic/300 RPG II/300 Image/300 Data Base Management System

Hardware

St	andard	Maxim	ium
128 KB Memory Modules	2	8	(1024 KBytes)
8-device GIC Channels	1	2	(16 devices)
4-line Asynchronous Data		4	(16 terminals)
Communication Channels	6		
Peripherals			
Interactive Display Terminals 50 to 9600 Baud	6	16 (in	addition to IDS)
180 cps Serial Printer		2	
20/50/120 MB Disc Drives			eyond system sc)
			,

Accessories

Work Surface

Peripherals at a Glance



Printers

2631A Serial Printer

The 2631A is a 180 character per second serial dot matrix impact printer.

Printing

7x9 dot matrix, impact

Print speed 180 cps (bi-directional) 227/136/68 characters per line in

compressed/normal/expanded mode

Character Sets

128-character USASCII

including underline and control codes

European subset characters (optional)

Forms Handling

8-channel fixed Vertical Forms Control

for 11-inch forms

Horizontal tabbing (up to 136 positions) Variable pitch, horizontal 5/10/16.7 cpi

vertical 6/8 cpi



Mass Storage

7906M 10+10 MB Master Drive 7906S 10+10 MB Add-On Drive

This disc drive has a 10 MB fixed disc and a 10 MB removable cartridge (front loading). The 7906M includes the controller and supports one Add-On Drive on the HP 300. On the HP 300 Model B the 7906M is used as system disc. Mass storage expansion requires a second Master Drive.

7920M/7925M 50/120 MB Master Drive 7920S/7925S 50/120 MB Add-On Drive

Both models have top-loading disc packs. The Master Drive includes the controller and supports one Add-On Drive on the HP 300.

Comparison of 79XX Discs

Туре	Total formatted capacity MB	Removable capacity MB	Tracks per surface	Sectors per track	Data surfaces	Avg. seek time ms	Avg. rotational delay ms	Data transfer rate kB/s
7906	19.6	9.8	411	48	2	25	8.33	937.5
7920	50.0	50.0	815	48	5	25	8.33	937.5
7925	120.1	120.1	815	64	9	25	11.1	937.5

HP 300 Mass Storage Growth Path

	Non-removable Disc 12 MB	7906M 7906S 20MB 20MB	7920M 7920S 50MB 50MB	7925M 7925S 120MB 120MB
HP 300 Model A		→ 32 → 52	→ 62* → 112	→ 132* → 252
HP 300 Model B				→ 140* → 260

^{*}These configurations are not recommended, because they are difficult to back up.



Interactive Display Terminals

The 264X family of Interactive Display Terminals offers a wide range of capabilities to suit on-line interactive data processing requirements. A 24 line by 80 character display and removable keyboard are common to all 264X terminals. Data rates up to 9600 Baud are supported through a standard RS-232 (CCITT V.24) interface.

2640B Interactive Display Terminal.

Low-cost terminal for general-purpose use.

2645A Display Station.

Powerful general-purpose terminal with optional off-line tape storage.

2648A Graphics Terminal.

Powerful general-purpose terminal with additional 720x360 dot raster scan graphics capability and optional off-line tape storage.

2647A Intelligent Graphics Terminal.

Powerful general-purpose terminal, user-programmable in BASIC, with 720x360 dot raster scan graphics capability, high-level graphics commands and off-line tape storage.

Note: The HP 300 does not offer a graphics software package at this time. However, users will be able to encode all graphics capabilities of the graphics terminals within their programs as well as use these terminals in general-purpose mode.

Interactive Display Terminal Features

	ive Dispia				
	2640B	2645A	2648A	2647A	
Maximum Baud Rate	2400	9600	9600	9600	
Maximum Memory	8KB	12KB	8KB	20KB	
Block or Character Mode		Stan	dard		
Option Slots supplied	2	7	4	1	
Character Set supplied	64— Roman	128— Roman	128— Roman	128— Roman	
Lower Case Characters	Optio	onal	Std	Std	
Inverse Video		Stan	dard		
User-defined Softkeys		8 Std	9 Std	8 Std	
2 Tape Cartridge Drives	Optional		Std		
Underline, Blink, Half-Bright	Optional				
Math Character Set	Optional				
Line Drawing Set	Optional ——				
Raster Scan Graphics			Std	Std	

For detailed specifications on peripherals refer to the HP 300 General Information Manual (HP Number 5953-3704).

HP 300 Configurator and Ordering Guide

Select HP 300 System 31032A HP 300 Model A (12 MB non-removable system disc) 31033A HP 300 Model B (10+10 MB fixed/removable system disc) Language Option (401-410) Voltage/Frequency Option (015-019) Power Cord Option (900-906) 31224A Math Character Set 31225A Line Drawing Set 31226A Large Character Set 31227A Roman Extension Character Set 31381A Work Surface	
Select Software and Software Support Std Amigo/300 and System Utilities 31449A Monthly payment for CSS 31032A-002 Prepaid Purchase Option	Plan 1 48 mos.CSS Plan 2 12 mos.CSS Order 48 Order 12
31442A Business Basic/300 31449A-001 Monthly payment for CSS 31442A-002 Prepaid Purchase Option	1 1 48 12 1
31445A RPG II/300 31449A-002 Monthly payment for CSS 31445A-002 Prepaid Purchase Option	1 1 48 12 1
31424A Image/300 31449A-003 Monthly payment for CSS 31424A-002 Prepaid Purchase Option	1 1 48 12 1
Select Terminals (up to 16) 2640B Interactive Display Terminal Opt 001 Add lower case characters 2645A Display Station Opt 007 Add dual tape cartridge 2648A Graphics Terminal Opt 007 Add dual tape cartridge 2647A Intelligent Graphics Terminal Terminal Accessories: Opt 201 Add Math Symbol Set Opt 202 Add Line Drawing Set Opt 203 Add Large Character Set 13234A Terminal Memory Module (4 KB) Select Printers (up to 2) 2631A-330 Serial Printer Opt 009 Add Extended Roman Character Set 26098A Pedestal for 2631A Opt 001 Add casters to pedestal	To help you plan your Mass Storage To help you plan your Mass Storage growth path refer to the chart on page 2. One Master Drive and one Add-On Drive may be added to an HP 300. To allow disc to disc data backup the selection of a Master Drive/Add-On Drive pair is recommended for the 7920 and 7925 models. — 7906M-100 10+10 MB Master Drive — 7906S 10+10 MB Add-On Drive — 7920M-100 50 MB Master Drive — 7920S 50 MB Add-On Drive — 7925M-100 120 MB Master Drive — 7925S 120 MB Add-On Drive Select ADCC Channels (up to 2 each ADCC Main and Extender) if you have selected any terminals in (3). — 31264A ADCC Main (terminals 1-4, 9-12) — 31265A ADCC Extd (terminals 5-8, 13-16) Note: The number of terminals which can be supported with adequate performance (response time) is a function of the application and the amount of main memory. Your HP Field Engineer will assist you in making this determination.

7 Select additional memory modules (Two 128KB modules standard, up to 6 additional modules can be added)

Add	1 Module for	384 KB tota
	2	512
	3	650
	4	778
	5	896
	6	1024

__ 31204A 128 KB Memory Module

8 Select additional GIC Channels (1 standard, up to 1 additional)

If you select a 7906M, 7920M or 7925M in **5** a second GIC is necessary

____ 31262A GIC Channel ____ Total (6)+(7)+(8) must not exceed 9

9 Select RS-232 Cables

If you are ordering any terminals selected in 3, you need

- for terminals connecting directly to an ADCC, one each RS-232 Cable
- —— 13232W RS-232 Cable 4.5 m
 b. for existing terminals with modem cables to be connected directly to an ADCC, one each RS-232 Modem Eliminator Cable
 - ____ 31390A 5 m RS-232 Modem Eliminator Cable
- to extend the distance of an RS-232 connection, RS-232 Extension Cables can be ordered. The total length of an RS-232 connection should not exceed 15 m (50 ft).
 - ____31391A 5 m RS-232 Extension Cable
 - ____ 31391B 10 m ____ 31391C 15 m

10 Select HP-IB Cables

If you are selecting either printers in **4** or a Master Disc Drive (7906M/20M/25M) in **5**, you need one HP-IB Extension Cable per device.

___ 31389A 1 m HP-IB Extension Cable ___ 31389B 2 m

___ 31389C 4 m ___ 31389D 8 m

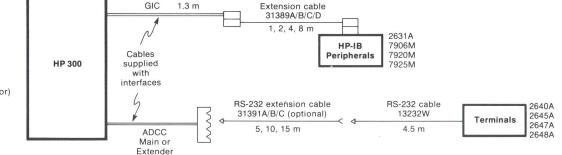
The total additional HP-IB cable length for all peripherals on one GIC Channel must not exceed the lengths shown in the following table.

Allowable HP-IB Cable Lengths

Number of External Devices	Standard GIC	Additional GIC
1	9 m	6 m
2	10 m	7 m
3	11 m	8 m
4	12 m	9 m
5	13 m	10 m
6	_	11 m
7	_	12 m
8	_	13 m

11 For Consumables and Training Courses refer to the Product List at the end of this publication.

For assistance in using this configurator refer to the sample configuration following this section. Options shown are either required or recommended. Additional options and prices can be found in the product list. Selections made on this and the following page may be transcribed to the HP 300 Configuration Form foldout in the back of this guide.

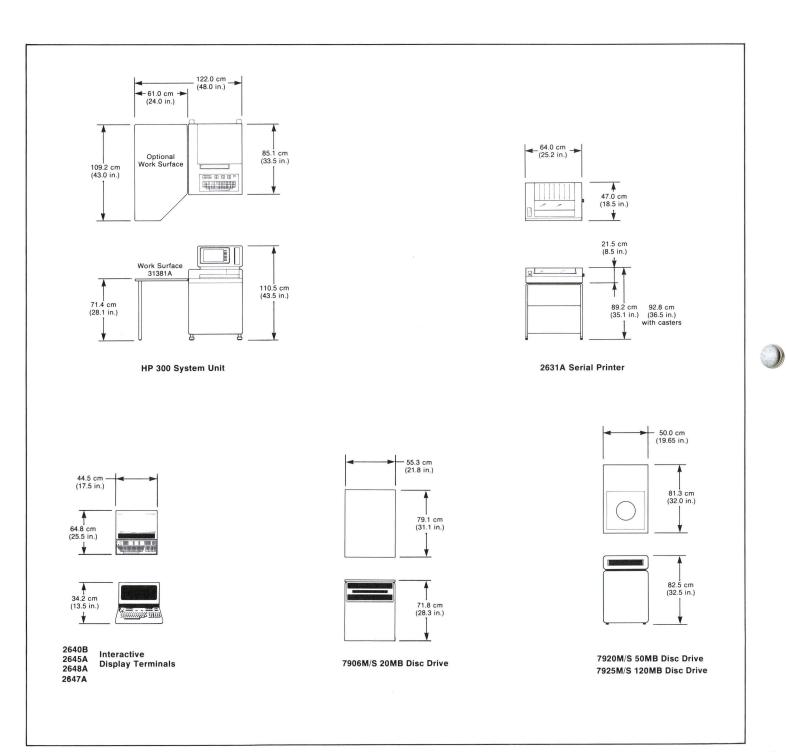


HP-IB

RS-232 Receptacle (Male connector)
RS-232 Plug (Female connector)

Note: Only supported HP-IB peripherals

Site Planning



Electrical Requirements, Heat Load and Weight

Complete the following table to estimate power requirements, heat load and weight. Fill in the appropriate values considering multiple units as applicable.

Product		rent at 220–240V	Heat Load	Weight	Power Cable Length (US)	Data Cable, Length
HP 300 Mod A System Unit units	10 A	5 A	800 W	118 kg (260 lb)	2.20 m (7 ft)	included, GIC: 1.50 m (5 ft) ADCC: 1.00 m (3 ft)
HP 300 Mod B System Unit and 7906M units	15 A	7.5 A	1350 W	263 kg (580 lb)	2.20 m (7 ft)	included, GIC: 1.50 m (5 ft) ADCC: 1.00 m (3 ft) HP-IB: 2.00 m (6 ft)
2631A Serial Printer units	2.7 A	1.3 A	265 W	23.5 kg (51 lb)	1.80 m (6 ft)	not included, select HP-IB cable 1, 2, 4, 8 m
2640B, 2645A, 2648A, 2647A Interactive Display Terminals	2.2 A	1.1 A	150 W	22.8 kg (50 lb)	2.20 m (7 ft)	not included, select RS-232 cable 4.50 m (15 ft)
7906M/20M/25M Disc Drive and Controller	6.8 A	3.4 A	720 W	159 kg (350 lb)	2.20 m (7 ft)	not included, select HP-IB cable 1, 2, 4, 8 m
units 7906S/20S/25S Add-On Disc Driveunits	4.9 A	2.5 A	510 W	143 kg (315 lb)	2.20 m (7 ft)	included, 3.00 m
	Total/	AAA	TotalW	Totalkg or lb		

Total current and total heat load can now be used to determine electrical power and possible air conditioning requirements. For trouble-free operation a dedicated power circuit should be provided for the HP 300 and its peripherals. In extreme power situations additional protective equipment such as an isolation transformer or lightning arrestor may be needed. Air conditioning is only necessary if operating temperature and humidity cannot be otherwise maintained within the limits given below.

Power outlets	US, Canada, Japan	NEMA 5-15	(15A)
	UK	BS 1363	(13A)
	Australia, New Zealand	AS C112	(7.5A)
	Europe (except UK and		
	Switzerland)	CEE 7-VII	(10/16A)
	Switzerland	SEV 1011	(10A)

Environmental Operating Requirements

Line Voltage

Line Frequency

Operating Temperature
Operating Humidity

Operating Humidity

 $100/120/220/240 \ V^{\sim} +5\%$

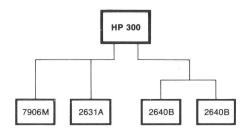
-10% single-phase 50/60 Hz ±3.5%

10°C to 40°C 20% to 80% RH

(Max Wet Bulb Temperature 26°C)

Sample Configuration

HP 300 with two 2640B terminals, one 2631A Serial Printer and 20 MB of total disc storage. The system is to be used for forms-oriented data entry employing the Image/300 Data Base Management System. Program development is in Business Basic/300, 384 KB of memory is chosen.



HP 300 Configurator and Ordering Guide

300 and System Utilities 48 31449A Monthly payment for CSS
31032A-002 Prepaid Purchase Option
A Business Basic/300
48 31449A-001 Monthly payment for CSS
31442A-002 Prepaid Purchase Option
A RPG II/300
31449A-002 Monthly payment for CSS
31445A-002 Prepaid Purchase Option
A Image/300
48 31449A-003 Monthly payment for CSS
31424A-002 Prepaid Purchase Option

3 Sele	ct Term	inals (up to 16)
2	2640B	Interactive Display Terminal
		Opt 001 Add lower case character
	2645A	Display Station
		Opt 007 Add dual tape cartridge
	2648A	Graphics Terminal
		Opt 007 Add dual tape cartridge

Terminal Acc	essories:
13231A	Display enhancements
	opt 201 Add Math Symbol Set
	opt 202 Add Line Drawing Set
	ont 203 Add Large Character Set

	13234A	Terminal	Memory	Module (4 KB)	
4		rs (up to			

opt 009 Add Extended Roman
Character Set
 26098A Pedestal for 2631A
ont 001 Add casters to pedestal

Plan 1 48 mos.CSS	Plan 2 12 mos.CSS
Order 48	Order 12
	1
1	1
48	12
	1
1	1
48	12
	1
1	1
48	12
	17

5 Select additional Mass Storage
To help you plan your Mass Storage growth path refer to
the chart on page 3. One Master Drive and one Add-On
Drive may be added to an HP 300. To allow disc to disc data
backup the selection of a Master DriveAdd-On Drive pair
is recommended for the 7920 and 7925 models.

7	906M-100	10 + 10	MB	Master	Drive
7	906S	10 + 10	MB	Add-Or	Drive
7	920M-100	50 MB	Ma	ster Driv	re
7	920S	50 MB	Add	I-On Dri	ve

7925M-100 120 MB Master Drive 7925S 120 MB Add-On Drive

6 Select ADCC Channels (up to 2 each ADCC Main and Extender) if you have selected any terminals in (3).

// 31264A ADCC Main (terminals 1-4, 9-12)

31265A ADCC Extd (terminals 5-8, 13-16)

Note: The number of terminals which can be supported with adequate performance (response time) is a function of the application and the amount of main memory. Your HP Field Engineer will assist you in making this determination.

7 Select additional memory modules (Two 128KB modules standard, up to 6 additional modules can be added) Add 1 Module for 384 KB total

2	512	
3	650	
4	778	
5	896	
6	1024	

1 31204A 128 KB Memory Module

8 Select additional GIC Channels (1 standard, up to 1 additional) If you select a 7906M, 7920M or 7925M in 5 a second GIC is necessary

9 Select RS-232 Cables
If you are ordering any terminals selected in 3, you need

- If you are ordering any terminals selected in 3, you need a. for terminals connecting directly to an ADCC, one each RS-232 Cable 4.5 m b. for existing terminals with modern cables to be connected reminals with modern cables to be connected RS-232 Modern Eliminator Cable one each RS-232 Modern Eliminator Cable C

10 Select HP-IB Cables

Select IPI-IB Cables
If you are selecting either printers in 4 or a Master Disc
Drive (7906M/20M/25M) in 5, you need one HP-IB
Extension Cable per device.

318394 1 m HP-IB Extension Cable
318396 2 m
318396 2 m
318390 8 m

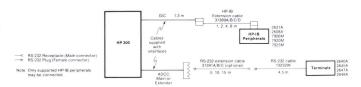
The total additional HP-IB cable length for all peripherals on one GIC Channel must not exceed the lengths shown in the following table.

Allowable HP-IB Cable Lengths

Number of		
xternal Devices	Standard GIC	Additional GIC
1	9 m	6 m
2	10 m	7 m
3	11 m	8 m
4	12 m	9 m
5	13 m	10 m
6	1	11 m
7	(100)	12 m
8	1-1	13 m

11 For Consumables and Training Courses refer to the Product List at the end of this publication.

For assistance in using this configurator refer to the sample configuration following this section. Options shown are either required or recommended. Additional options and prices can be found in the product list. Selections made on this and the following page may be transcribed to the HP 300 Configuration Form foldout in the back of this guide.



Electrical Requirements, Heat Load and Weight

Product	Curr a ¹ 100–120V		Heat Load	Weight	Power Cable Length (US)	Data Cable, Length
HP 300 Mod A System Unit	10 A	5 A	800 W	118 kg (260 lb)	2.20 m (7 ft)	included, GIC: 1.50 m (5 ft) ADCC: 1.00 m (3 ft)
HP 300 Mod B System Unit and 7906M	15 A	7.5 A	1350 W	263 kg (580 lb)	2.20 m (7 ft)	included, GIC: 1.50 m (5 ft) ADCC: 1.00 m (3 ft)
units	15		1350	263		HP-IB: 2.00 m (6 ft)
2631A Serial Printer	2.7 A	1.3 A	265 W	23.5 kg (51 lb)	1.80 m (6 ft)	not included, select HP-IB cable
	2.7		265	23.5		1, 2, 4, 8 m
2640B, 2645A, 2648A, 2647A Interactive Display Terminals	2.2 A	1.1 A	150 W	22.8 kg (50 lb)	2.20 m (7 ft)	not included, select RS-232 cable 4.50 m (15 ft)
2 units	4.4		300	45.6		
7906M/20M/25M Disc Drive and Controller	6.8 A	3.4 A	720 W	159 kg (350 lb)	2.20 m (7 ft)	not included, select HP-IB cable 1, 2, 4, 8 m
units						
7906S/20S/25S Add-On Disc Drive	4.9 A	2.5 A	510 W	143 kg (315 lb)	2.20 m (7 ft)	included, 3.00 m
units						
	Total 22.1 A	A	Total 1915 W	Total 332.1 kg		

HP 300 Configuration

Product Number	Option	Description	Total Price	Total Maint. per Mo
31033A		HP 300 System	45.000	225
3/225A		Line Drawing Set	150	
3/38/A		Work Surface	250	
31449A		System Software CSS		80
3/442A		Business Basic /300	1,500	
31449A	001	Basic /300 CSS		40
31424A		Image / 300	2000	
31449A	003	Image / 300 CSS		80
2640B		Display Terminal	5,200	36
263/A	330	Serial Printer	3,375	31
26098A		Pedestal for 2631A	275	
31264A		ADCC Main	1600	7
31204A		128KB Memory Module	4000	15
/3232W		RS-232 Cable	150	
313890		HP-IB Cable 4m	75	
			\$ 63,575	\$ 514
	31033A 31225A 3138/A 31449A 31449A 31449A 31424A 31449A 2640B 2631A 26098A 31264A 31204A 13232W	Number Option 31033A 31225A 3138/A 31449A 31449A 31449A 31449A 31449A 26408 263/A 330 26098A 31264A 31204A /3232W	Number Option Description	Number Option Description Price

Configuration steps

1. Select HP 300 System

2. Select software and software support

3. Select Terminals

4. Select Printers

5. Select additional Mass Storage

Select ADCC channels (for terminals)
 Select additional memory modules
 Select additional filt Channels
 Select RS-232 cables
 Select RS-232 cables
 Select RS-230 cables
 Select RS-230 cables

Support

The HP 300 Computer System is backed by a wide variety of customer support services.

Documentation

User Manuals

31000-90002*	HP 300 General Information Manual
31000-90001*	HP 300 Owners Manual
31000-90025*	HP 300 Console Operations Manual
31000-90003*	HP 300 Error Messages Manual
31000-90009*	HP 300 Operating System Reference Manual
31000-90010*	HP 300 Typist Reference Manual
31000-90033*	HP 300 Sort/Merge Reference Manual
31442-90001*	Business Basic/300 Reference Manual
31445-90001*	RPG II/300 Reference Manual
31445-90002*	RPG II/300 Sample Programs Manual
31424-90001*	Image/300 Reference Manual
31000-90004	HP 300 Architecture Guide
31000-90005	HP 300 Multiterminal Applications Guide
31000-90008	HP 300 Display System Application Guide
31000-90034	HP 300 System Services Guide
31000-90035	HP 300 Program and Library Operations Guide
31000-90037	HP 300 File and Peripheral Access Guide

^{*}included in Manual Set shipped with each HP 300 system

Customer Training

For prices refer to the product list at the end of this publication.

31360A HP 300 Software Consulting

This service provides one day of on-site consulting by a Hewlett-Packard System Engineer especially trained on the HP 300 Computer System.

Duration: 1 day

31362A HP 300 Introduction for Programmers

This course is designed to give the HP 300 programmer sufficient familiarity with the system and the associated documentation to allow the development of straightforward applications using the major facilities of the operating system, utilities and languages. Extensive hands-on experience is included.

This course is normally taught at HP Field Training Centers, but arrangements can be made to have it taught at a customer

Prerequisites: Programming experience in RPG II or BASIC

Duration: 5 days

will be helpful.

31363A HP 300 System Course

This course teaches the student how to design and develop application programs in Business Basic/300 with full utilization of operating system services. Special emphasis is placed on the development of multiterminal applications and the use of the Integrated Display System. The course includes the equivalent of the HP 300 Introduction for Programmers training and is taught at HP Field Training Centers.

Prerequisites: The student should be a competent BASIC programmer with experience in string, file and formatted I/O operations. Familiarity with block-structured languages such as SPL/3000, ALGOL or PL/I is highly desirable.

Duration: 3 weeks (15 days)

Site Preparation Assistance and System Installation

The HP 300 has been designed for the office environment and in most cases needs no special provisions for power, noise abatement or air-conditioning. To assist you in preparing for the installation of your HP 300 system you will receive the HP 300 Owners Manual prior to installation. It contains all you need to know to prepare for a successful HP 300 operation. In difficult situations consult your HP Sales Representative for assistance with your site planning.

Upon delivery of all components of your HP 300 system, call your HP Customer Engineer who will install the HP 300 and its peripherals. Start-up assistance will be provided by your HP System Engineer.

For add-on purchases each product's status with respect to installation is specified individually in the product list at the end of this publication.

On-site installation assistance includes travel (in the US, up to 100 miles from the nearest HP service facility. A charge may be made for travel outside of the 100-mile service radius).

Hardware Maintenance

To keep your HP 300 installation running effectively and guarantee maximum availability to you, HP offers maintenance programs to suit your individual requirements.

Maintenance Plan	Coverage	Days per week
 Basic Maintenance Plan Extended Coverage Plan 01 Extended Coverage Plan 02 Extended Coverage Plan 03 	8 am-12 pm (16 hrs)	5 or 7 5 or 7 5 or 7 5 or 7



Typical response time for all plans is 4 hours within a Zone 1 radius (typically 100 miles) from a maintenance office, and 24 hours up to a Zone 2 radius (typically 200 miles) during the time of coverage. For greater distances HP will make the best possible effort to speedily repair the equipment.

The monthly cost of a maintenance contract is based on the type of plan, the service distance and the Basic Monthly Maintenance Charge (BMMC) of the equipment under contract. BMMC charges for each product are shown in the product list at the end of this publication.

Customers who prefer to employ HP Service on a time-and-materials basis may take advantage of HP's per-call service. While it is HP's policy to respond as quickly as possible to all requests, maintenance plan commitments necessarily receive priority.

Software Support Services

For all standard and optional software products on the HP 300 Hewlett-Packard offers a Comprehensive Software Support Plan including the following services.

Software Status Bulletins. Bimonthly status bulletins provide you with information regarding future software enhancements, current software design errors, and suggested interim programming solutions.

Software Updates. The latest updates and revisions to software purchased for your site will be mailed to you on flexible disease.

discs on a regular scheduled basis.

 Reference Manual Updates. You are automatically supplied with a set of manual updates pertinent to the software purchased for your site. These updates are mailed directly to your System Manager.

 Phone-In Consulting. If you have any questions or discover a software problem, your System Manager may call a trained HP System Engineer via a special telephone "hot line" to discuss your questions and provide advice to resolve any problems.

 On-Site Software Service. In instances when a problem cannot be resolved over the telephone, your System Manager can request on-site software assistance. If the problem proves to be associated with HP software, the visit will be

covered by the software support plan.

 Communicator. As part of software support, you will receive one subscription of the COMMUNICATOR, a publication containing information on software releases, training schedules, lists of available documentation and articles of general interest. The COMMUNICATOR is published 6 times

Multiple Site Support. For users with multiple HP 300 Computer Systems, HP's software support plan is very flexible. You may elect to have one System Manager to support all your sites, a System Manager at each site, or System Managers at designated sites.

Comprehensive Software Support must be ordered with the HP 300 system and for add-on software products for either 12 or 48 months following the 90-day software warranty period. The 12-month plan requires payment of a lump sum at the time of purchase (also called Prepaid Purchase Plan) and the 48-month plan carries a monthly charge. In either case, the software is fully licensed to the customer at the end of the term. Ongoing software support is available on the basis of a Software Subscription Service (SSS) or continued Comprehensive Software Support (CSS).

Example of how to order software and software support

Plan 1 Initial payment and 48 monthly payments for CSS

Amigo/300 and System Utilities Business Basic/300	48 x 31499A 1 x 31442A
	48 x 31499A-001
RPG II/300	1 x 31445A
	48 x 31499A-002
Image/300	1 x 31424A
	48 x 31499A-003

Plan 2 Initial payment (Prepaid Purchase Plan) only

Amigo/300 and System Utilities	1 x 31032A-002 12 x 31499A
Business Basic/300	1 x 31442A
	1 x 31442A-002 12 x 31499A-001
RPG II/300	1 x 31445A
	1 x 31445A-002
1	12 x 31499A-002
Image/300	1 x 31424A
	1 x 31424A-002
	12 x 31499A-003

Warranty

Hardware products

Hewlett-Packard (HP) warrants its hardware against defects in materials and workmanship. During the warranty period of 90 days following installation, HP will, at its option, repair or replace hardware which proves to be defective.

Software and firmware products

Hewlett-Packard warrants that its software and firmware designated by HP for use with a CPU will execute its programming instructions when properly installed on that CPU. HP does not warrant that the operation of the CPU, or software, or firmware will be uninterrupted or error free. During the warranty period of 90 days following installlation, HP will provide its normal Software Support Services at no charge.

Limitation of warranty

The foregoing warranty shall not apply to defects resulting from:

- 1. improper or inadequate maintenance of buyer;
- 2. buyer-supplied software or interfacing;
- 3. unauthorized modification or misuse;
- 4. operation outside of the environmental specifications of the product; or
- 5. improper site preparation and maintenance.

Multi-Unit Purchase Agreements

Purchase agreements are available to volume end-users and Original Equipment Manufacturers (OEM) who resell HP products after adding value. For such purchases Hewlett-Packard offers discounts based on volume. It is possible to combine various types of HP system and peripheral products under one purchase agreement for maximum discount benefits.

Multi-Unit Purchase Agreements are made for one year and are renewable. Agreement terms and discount schedules are available from your HP Field Engineer.

Sales Financing

Hewlett-Packard maintains a full customer sales financing capability. Options which may be selected under the plans include early buyout, purchase option, lease renewal, fiscal funding termination provision and equipment upgrade. As with rental plans, the upgrade option permits the addition of new equipment to the original system at any time during the term of the agreement.

Your HP Field Engineer will be glad to develop a sales financing plan for you to match your needs. The following table summarizes the available options.

Hewlett-Packard Sales Financing Plans

T of I	0	Conditions				Term (months)		
Type of Lease	Customer	Conditions		12	18	24	36	48	60
Prime Government	State and Local	Payment	Payment*	8.780		4.603	3.215	2.524	2.112
Lease Plan	Governments	>\$200/mo.	Purchase*	10		10	10	7.5	7.5
Custom Computer	0	Amount	Payment			4.754	3.369	2.683	2.275
Lease Plan	Commercial	financed >\$50,000	Purchase			12.5	10	7.5	7.5
Time Payment Plan (Tax Exempt Purchase Agreement)	State and Local Gov't Agencies	Payment >\$200/mo.	Finance charge/ Purchase			Add-on Rate/Y at end of term	ear* (6-60 mo	nths)	
Tax Exempt Lease	qualifying for tax exempt interest rates	Payment	Payment	8.633		4.458	3.069	2.375	1.960
lax Exempt Lease	exempt interest rates	>\$200/mo.	Purchase			\$1.00 at e	nd of term		
Standard Conditional Sales Contract	Commercial	Payment >\$100/mo.	Finance charge/ Purchase			Add-on Rate/ at end of term	Year (12-48 m	onths)	
Prime Conditional Sales Contract	Commercial, Non-Profit and Private Institute	Amount financed >\$15,000	Finance charge/ Purchase			Add-on Rate/ at end of term	Year (12-48 m	onths)	
Character of Lance Diag	0	Amount /	Payment	8.979		4.801	3.418	2.733	2.322
Standard Lease Plan	Commercial	financed / Payment >\$2,500 / >\$200/mo.	Purchase			pos	sible		
Daines Lance Diam	0	Amount	Payment	8.757		4.580	3.192	2.500	2.088
Prime Lease Plan	Commercial	financed >\$15,000	Purchase	10		10	10	7.5	7.5

Payment refers to monthly payment as % of amount financed.
Purchase refers to buyout % of amount financed at end of term.
Add-on Rate/Year refers to listed % times number of years times amount financed.

Ordering

To list your product selections you may use the blank HP 300 Configuration form in the back of this publication.

Product List

Product lumber	Opt	Description	Price	Monthly Maint. Charge
stem				
31032A		HP 300 Computer System, including HP 300 System Unit with ICF/25 Processor, Integrated Display System, 256 KB of error-correcting memory, General I/O Channel, 12 MB non-removable disc, 1 MB Flexible Disc Drive and Standard Software with Amigo/300 Operating System, System Utilities, HELP, Math Library, System Build, Diagnostics, Typist, Sort/Merge. Includes on-site installation and complete User Manual Set. 110V, 60 Hz operation, US power cord.	35000	160
31033A		Same as 31032A, except 12 MB non-removable system disc is replaced with external 10 + 10 MB 7906M fixed/removable system disc. Includes disc data cable and on-site installation.	45000	225
		System Options applying to both 31032A and 31033A:		
	015	220V, 50 Hz operation		
	016	100V, 50 Hz operation		
	017	240V, 50 Hz operation		
	018 019	100V, 60 Hz operation 220V, 60 Hz operation		
	900	U.K. Power Cord		
	900	Australia/New Zealand Power Cord		45.45
	902	Europe (except U.K.) Power Cord		
	906	Swiss Power Cord		
	401	French Option		
	402	German Option		47.2
	403	Italian Option		
	404	British Option Includes local keyboard, character set and		
	405	Dutch Option Language support		
	406	Swedish Option		
	407	Spanish Option		
	408	Finnish Option		
	409 410	Norwegian Option Danish Option		
	410	Danish Option		

Optional Hardware (including installation)

31204A	128 KB Error-correcting Memory Module	4000	15
31262A	General I/O Channel (GIC)	1800	10
31264A	Asynchronous Data Communication Channel (ADCC Main)	1600	7
31265A	Asynchronous Data Communication Channel (ADCC Extender)	1600	7
31224A	Add Mathematical Symbol Set to Integrated Display System	100	
31225A	Add Line Drawing Set to Integrated Display System	150	
31226A	Add Large Character Set to Integrated Display System	150	
31227A	Add Roman Extension Character Set to Integrated Display System	150	
31381A	Work Surface	250	

Product Number	Opt.	Description	Monthly Plan 1 48 mos CSS	Prepaid Plan 2 12 mos CSS	Software Subscription Service (SSS)
oftware and	d Softwa	re Support			
31499A 31032A 31442A 31445A 31424A	001 002 003 002 002 002	Monthly charge for Amigo/300 and System Utilities Monthly charge for Business Basic/300 Monthly charge for RPG II/300 Monthly charge for Image/300 Amigo/300 and System Utilities, Prepayment Option Business Basic/300 Business Basic/300, Prepayment Option RPG II/300 RPG II/300, Prepayment Option Image/300 Data Base Management System Image/300, Prepayment Option	Initial Monthly 80 40 40 80 1500 1500 2000	Initial 960 480 480 960 1440 1500 720 1500 720 2000 1440	Monthly (after term) 25 15 15 25
Product Number	Opt	Description		Price	Monthly Maint. Charge
lanuals					
31386A 31387A		HP 300 Manual Set (included in HP 300 Computer Sy products also include appropriate manuals and codir applicable) HP 300 Applications Guides Set		125 75	
rinters					
2631A	330	180 character per second Serial Printer, 136 character characters per inch. Expanded and compressed print 227 characters per line. Automatic bi-directional prin underline and display function mode. 8-channel fixed Control, horizontal tabs. Includes installation. HP-IB c Add Extended Roman Character Set	modes for 68 and ting. Automatic I Vertical Forms	3375 150	31
26098A	015 016 017 001 002	220V, 38–62 Hz operation 110V, 48–62 Hz operation 240V, 48–62 Hz operation Pedestal for 2631A Printer Add casters to pedestal Add paper catcher		275 15 50	

Product Number	Opt.	Description	Monthly Plan 1 48 mos CSS	Prepaid Plan 2 12 mos CSS	Software Subscription Service (SSS)
oftware and	d Softwar	re Support			
31499A 31032A 31442A 31445A 31424A	001 002 003 002 002 002	Monthly charge for Amigo/300 and System Utilities Monthly charge for Business Basic/300 Monthly charge for RPG II/300 Monthly charge for Image/300 Amigo/300 and System Utilities, Prepayment Option Business Basic/300 Business Basic/300, Prepayment Option RPG II/300 RPG II/300, Prepayment Option Image/300 Data Base Management System Image/300, Prepayment Option	Initial Monthly 80 40 40 80 1500 1500 2000	Initial 960 480 480 960 1440 1500 720 1500 720 2000 1440	Monthly (after term) 25 15 15 25
Product Number	Opt	Description		Price	Monthly Maint. Charge
lanuals					
31386A 31387A		HP 300 Manual Set (included in HP 300 Computer Sy products also include appropriate manuals and codir applicable) HP 300 Applications Guides Set		125 75	
rinters					
2631A	330 009 015	180 character per second Serial Printer, 136 character characters per inch. Expanded and compressed print 227 characters per line. Automatic bi-directional print underline and display function mode. 8-channel fixed Control, horizontal tabs. Includes installation. HP-IB c Add Extended Roman Character Set 220V, 38–62 Hz operation	modes for 68 and ting. Automatic I Vertical Forms	3375 150	31
26098A	016 017 001 002	110V, 48–62 Hz operation 240V, 48–62 Hz operation 240V, 48–62 Hz operation Pedestal for 2631A Printer Add casters to pedestal Add paper catcher		275 15 50	

Product Number	Opt.	Description	Price	Monthl Maint. Charge
eractive [Display T	erminals		
2640B	001 015 016 **	Interactive Display Terminal with page or character mode (switch-selectable); 64-character upper case Roman set; 1024 Bytes of storage, expandable to 8192 Bytes; inverse video; RS-232C 110-2400 Baud; 2 option slots. Installation and data cable not included. Add lower case and displayable control characters 220-240V, 50 Hz operation 115V, 50 Hz operation Select terminal accessories from list below	2600	18
2645A		Display Station. Block or character mode; 128-character case Roman; 4096 Bytes of memory, expandable to 12288 Bytes; inverse video; editing features; 8 user-defined soft keys; 110-9600 Baud RS-232C; 7 option slots. Installation and data cable not included.	3500	20
	007 013 015 016 **	Add integrated dual-cartridge tape transports (Requires 2 option slots) Add 5 Mini Cartridges 230V, 50 Hz operation 115V, 50 Hz operation Select terminal accessories from list below	1600 90	8
2648A	007	Graphics Terminal. 720 x 360 dot graphics image memory and random access alphanumeric memory (expandable by 4K Bytes), 128-character Roman, inverse video, editing, 9 user-definable soft keys, 110–9600 Baud RS-232C, 4 option slots. Installation and data cable not included.	5500	22
	007 013 015 016	Add integrated dual-cartridge tape transports (requires 2 option slots) Add 5 Mini Cartridges 230V, 50 Hz operation 115V, 50 Hz operation	1600 90	8
2647A	242	Intelligent Graphics Terminal. 720 x 360 dot graphics image memory and random access alphanumeric memory, BASIC interpreter with graphics commands, multiple automatic plotting, 128-character Roman, inverse video, 8 user-definable soft keys, 75 lines of display memory, RS-232C communications, integrated dual-cartridge tapes, 1 option slot. Installation and data cable not included.	8300	50
	013 015 016	Add 5 Mini Cartridges 230V, 50 Hz operation 115V, 50 Hz operation	90	
rminal Acc	cessories			
13231A		Display enhancements. Adds blinking, half-bright and underline and provides for addition of three 128-character character sets, requires 1 option slot.	250	
	201 202	Add Mathematical Symbol Set Add Line Drawing Set	100 150	

Product Number	Opt.	Description	Price	Monthly Maint. Charge
13234A 13232W	203	Add Large Character Set Terminal Memory Module (4 KB) RS-232 Cable, female connector (plug), 4.5 m (15 ft)	150 300 75	
ss Storag	е			
7906M	100	10 + 10 MB Master Disc Drive (first drive), includes disc controller and cartridge. HP-IB cable not included.	14800	82
7906S	015	230V, 50 Hz operation 10 + 10 MB Add-On Disc Drive, includes disc cartridge and data cables. 230V, 50 Hz operation	10000	55
7920M	100	50 MB Master Disc Drive (first drive), includes disc controller and disc pack. HP-IB data cable not included.	17800	81
7920S	015 015	230V, 50 Hz operation 50 MB Add-On Disc Drive, includes disc pack and data cables. 230V, 50 Hz operation	13000	54
7925M	100	120 MB Master Disc Drive (first drive), includes disc controller and disc pack. HP-IB cable not included.	21800	89
7925S	015 015	230V, 50 Hz operation 120 MB Add-On Disc Drive, includes disc pack and data cables. 230V, 50 Hz operation	17000	62
		Installation of disc drives: On-site installation is included unless specified otherwise in an HP Purchase Agreement		
oles				
31389A 31389B 31389C 31389D 31390A 31391A 31391B 31391C		HP-IB Cable, 1 m (3 ft) HP-IB Cable, 2 m (7 ft) HP-IB Cable, 4 m (13 ft) HP-IB Cable, 8 m (26 ft) RS-232 Modem Eliminator Cable, 5 m (15 ft) RS-232 Extension Cable, 5 m (15 ft) RS-232 Extension Cable, 10 m (33 ft) RS-232 Extension Cable, 15 m (50 ft)	60 65 75 90 60 90 105 120	
nsumables	3			
62-0061 631-60060 608-90040 608-60061 20-7364 64-0100 940A 394A 356A		Mini Cartridge for 2645A Display Station Ribbon cartridge (black) for 2631A printer, box of 6 2608A Printer Spacing Chart, Pad of 50 Ribbon cartridge (black) for 2608A printer, pack of 6 2608A Paper Alignment Guide Flexible Discs, Box of 10 (unformatted, double-sided) 7906 Disc Cartridge 7920 Disc Pack 7925 Disc Pack	18 15 15 135 25 90 180 600 850	

Product Number	Opt.	Description	Month Price Main Charg
aining			
31360A 31362A		HP 300 Software Consulting (1 day) HP 300 Introduction for Programmers	500 500

