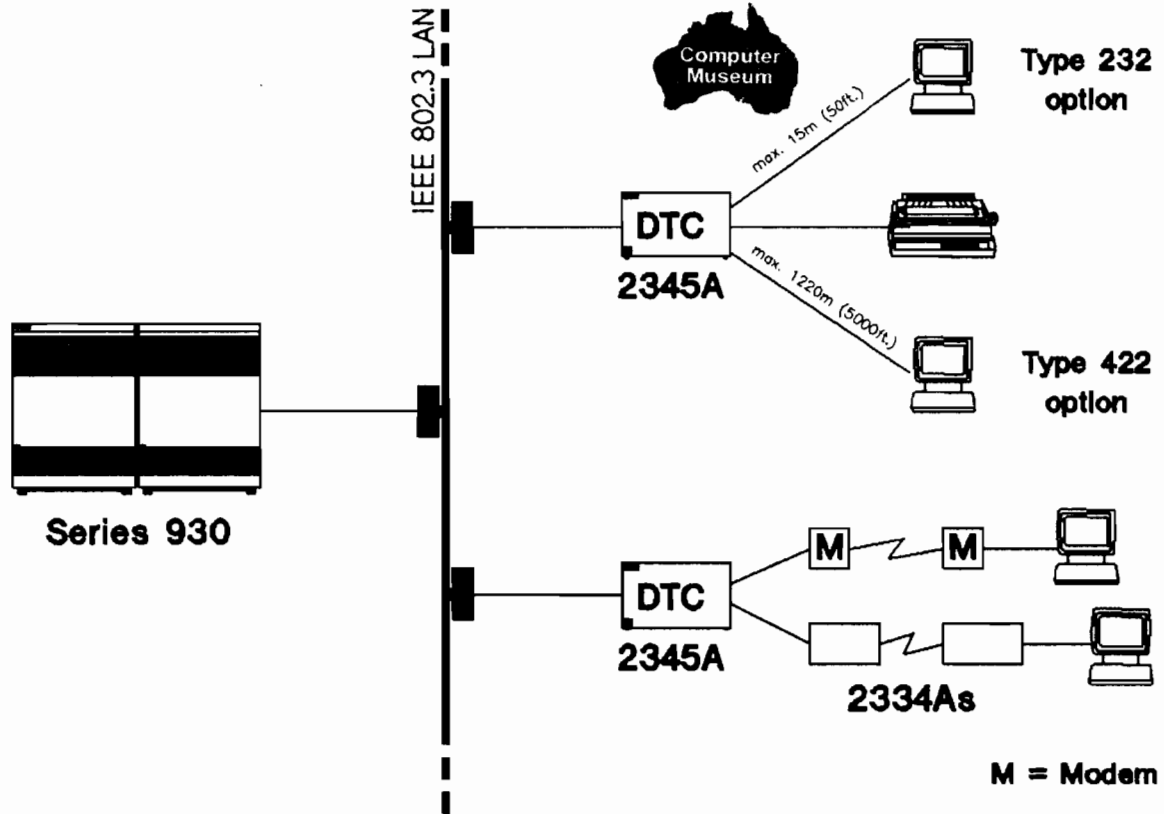


HP 2345A



Distributed Terminal Controller

Sales Brief



Flexible Terminal Connections

The HP 2345A Distributed Terminal Controller (DTC) connects terminals and serial printers to HP 3000 Series 930 and 950 computers using a brand new approach. Instead of concentrating all terminal cables in or around the system cabinet, the Series 930 and 950 let HP 2345A DTCs handle the physical connections outside the system cabinet, in its vicinity or farther away on an IEEE 802.3 LAN cable. Combined with the choice between thin or thick LAN cable and the availability of three interface options, the Distributed Terminal Controller offers flexible, economical and well-organized terminal connections!

Each HP 2345A DTC offers:

- up to 48 connections for terminals, serial printers and PCs.
- the choice between Type 232 or Type 422 connections for local devices, or RS-232-C modem connections for remote devices.
- data transfers at 300, 1200, 2400, 4800, 9600 and 19200 bps.
- the choice between regular LAN cable for long distances or ThinLAN cable for shorter distances between the system and DTCs.
- support for full-duplex modems and serial printers.

Typical Applications

The HP 2345A DTC gives you unprecedented flexibility in organizing workstation connections, thanks to the choice of interface options, the availability of two types of LAN cables and the variety of locations relative to the 900 Series system.

Interface Options

Three interface options are available to best meet your terminal connection needs:

- the Type 232 option (HP 2345A opt. 803 or HP 2346A add-on) offers eight ports for devices in the vicinity of the DTC. It is based on the RS-232-C standard and is compatible with the Type 232 option used on Advanced Terminal Processors (ATPs) on HP 3000 Series 42 - 70 systems.
- the Type 422 option (HP 2345A opt. 805 or HP 2346B add-on) offers eight ports for devices located at up to 1220m (4000ft.) from the DTC. It is based on the RS-422 standard.
- the modem option (HP 2345A opt. 625 or HP 2346C add-on) offers six ports for remote devices connected over modems.

Up to six of the above options can be ordered with an HP 2345A DTC. If less than six options are ordered, the available slots can be filled later by installing the HP 2346A/B/C add-on cards.

DTCs offer up to 48 ports for local connections, up to 36 ports for remote connections, or between 36 and 48 ports when local and remote connections are combined.

LAN Cabling

Two types of IEEE 802.3 LAN cables exist, which differ in their physical appearance, their purchase and installation costs, and their applications. The regular Type 10BASE5 cable ("thick" LAN cable) is ideal for long distances, as a backbone in a building. Type 10BASE2 (ThinLAN) cable is more flexible, less expensive, more limited in distance, and more appropriate when equipment is in a single room.

The HP 2345A DTC accommodates both types of cable and provides in its standard configuration all the hardware needed to connect to thick cable. Optionally, ThinLAN attachment hardware can be substituted.

Physical Distribution

Using the IEEE 802.3 LAN as a backbone for workstation connections opens new possibilities for the layout of terminal cables. Segments of thick LAN cable can be up to 500m long, and the HP 92223A Repeater Kit allows for as much as 1500m (5000ft.) between a 900 Series system and an HP 2345A DTC.

This means you can

- leverage existing terminal cables, from your terminals to the EDP room, and place the DTCs where all cables converge.
- dispatch DTCs along the LAN cable, closer to user areas. This way, large numbers of cables can be avoided in your system's vicinity, since the sole LAN cable can attach all DTCs to their 900 Series system.
- or, of course, combine the two approaches, re-using existing cables in some user areas and install a LAN cable and DTCs in other areas, where a large number of terminals need access to the same system.

Features

- HP 2345A DTCs attach to the 900 Series computer over an IEEE 802.3 LAN. Added to the modularity of the DTC, this yields flexibility in cabling while assuring a smooth growth path from few connections up to 400 on a Series 930.
- Only one I/O slot on the system's Channel I/O Bus is needed (for the interface to the LAN), even for large terminal configurations. Adding terminals is as simple as ordering additional DTCs.
- Terminals, PCs and serial printers can be connected to DTCs in three different ways: over local Type 232 or Type 422 interfaces, or using modems. You can select what is most appropriate and mix interfaces in a DTC as needed.
- Data is transferred to the terminal at up to 19200 bps, providing improved productivity when using a terminal.
- If you currently use MPE V based HP 3000 systems, you will appreciate the compatibility between the Advanced Terminal Processors your terminals connect through and the DTC on the 900 Series MPE XL based computers. HP cables currently used on ATPs can also be re-used in most cases.

Workstation Cables

The HP cables recommended for terminal and printer connections to the HP 2345A DTC are listed in the *900 Series Networking Specification Guide Supplement* (P/N 5954-6341) and in the *900 Series Supplement* (P/N 5954-7423) to the *HP3000 System Configuration Guide* (P/N 5953-7573). The cables can be ordered separately or as options to the respective workstation.

Supported Workstations

Terminals

2392A
2393A
2397A
2622A (ROM datecode 3199 and later)
2624B (ROM datecode 3139 and later)
2627A (ROM datecode 3487 and later)
150A (*)
150B/Touchscreen (*)
150 II/Touchscreen II (*)
Vectra (*)
Portable PLUS (*)

(*) in Terminal Emulation mode

Printers

2934A
LaserJet (over local connections only)

Modems

The following modems have been tested and can be used with modem interfaces on the HP 2345A DTC (HP 2345A opt. 625 or HP 2346C add-on).

<u>Modem type</u>	<u>Baud rates</u>
HP 37212A	300, 1200
HP 35016A	300, 1200
HP 35141A	300, 1200
Bell 212A	300, 1200
Hayes Smartmodem 1200 or HP 92205A	300, 1200
Racal-Milgo MPS1222	1200
Racal-Vadic 3400	1200
A-J 1212 AD1 or HP 92205J	300, 1200

Ordering Information

<u>Product Number</u>	<u>Description</u>
2345A	Distributed Terminal Controller. Comes with a 6 m Attachment Unit Interface (AUI) cable, a Medium Attachment Unit (MAU) and a tap
-015	Set for 220V Operation
-241	Delete the AUI, the MAU and the tap
-242	Delete the AUI, the MAU and the tap; set the unit for operation on ThinLAN cable and provide a BNC T-Connector
-625	Provide six 25-pin modem connections
-803	Provide eight 3-pin local Type 232 connections
-805	Provide eight 5-pin local Type 422 connections

Order the following products to have additional connections installed on existing HP 2345A DTCs:

2346A	Eight 3-pin Type 232 connections
2346B	Eight 5-pin Type 422 connections
2346C	Six 25-pin modem connections

Installation and Support

Both the HP 2345A DTC and the HP 2346A/B/C add-on cards are installed by an HP Customer Engineer. They are also eligible for basic and standard maintenance agreements.

Documentation

The following manuals are shipped with the Series 930 or the HP 2345A DTC and contain technical specifications and references for planning and installing terminal connections on a Series 930:

2345-90001 DTC Installation and Service Manual

32022-90001 ASC System Manager's Reference Manual

32022-90002 ASC Programmer's Reference Manual

32022-90003 ASC User's Guide

32022-90004 ASC Troubleshooting Manual

The three documents below contain useful information. Please request them from your Sales Representative.

5954-6341 900 Series Networking Specification Guide Supplement

5955-7680 LAN Cable and Accessories Installation Manual

5954-7423 900 Series Supplement to HP 3000 System Configuration Guide (5953-7573)