Post Office Telecommunications

DLZ 902

Datel 200 Service

This is a low speed data transmission service which is equally suited to both large and small organisations, particularly where bureau-type activities are involved.



Description

The service is particularly suited to the situation where access to a computer is required by a large number of low speed terminals, typically a timesharing bureau and its customers. Data is transmitted at speeds of up to 200 bits/sec over telephone circuits. Whilst the Public Switched Telephone Network (PSTN) is normally used, private circuits sometimes provide an economical alternative.

Information to and from the data terminal is translated by a modulatordemodulator (modem) into a signal suitable for transmission over a telephone circuit. When using the PSTN the modem must be provided by the Post Office. Customers may connect to the modem any terminal equipment that has been permitted by the Post Office for connexion to the Datel 200 Service.

A choice of two modems is offered. The standard modem is housed in a case for table mounting. Where several modems are required at one location (such as computer centres) racks can be provided, for an additional charge, to house the modems. Alternatively, a miniaturised modem is available which is incorporated into a plinth under a telephone. This may be used for many applications where the full capability of the standard modem is not required.

How it operates

A telephone associated with the modem is used to call the distant end. When the connexion has been established the line is switched to the modem. There are three methods of switching the modem to line : by press buttons on the telephone instrument;

by a switch on the private terminal equipment;

automatically from the private terminal equipment.

Facilities

A number of optional facilities are available with the Datel 200 Service to suit individual requirements.

Among these facilities, some of which attract an additional charge, are :--

- 1 automatic origination of calls
- 2 speeds of up to 300 bits/sec on an unassured basis
- 3 alternative use of the PSTN as standby for private circuits
- 4 speech and signalling on private circuits
- 5 automatic answering of incoming international calls
- 6 remote testing of modems
- 7 control facilities for computer centres (see descriptive leaflet DLZ 911).

Diagram of System



M – Modem

Standard Modem

The standard modem is housed in a two tone grey metal case. There are no controls to which access is normally required but there is a test button at the rear. The dimensions, weight and specifications are approximately :— Height 165 mm $(6\frac{1}{7})$

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Width	368 mm	$(14\frac{1}{2}'')$
Length	416 mm	(161)
Weight	13.5 Kg	(30 lbs)
The maximum permissible height		
above floor level is 1.5 m (4' 10").		

Maximum temperature 30°C on all sides of the unit

Power Supply 200-250 volts AC : 50 Hz ± 10%

NB—the customer to provide a 3-pin socket outlet of at least 3 amp rating Power consumption 15 watts

approximately Modulation Frequency shift keying Mode Full duplex

Line 2-wire PSTN: 2-wire private circuit

Data Rate Up to 200 bits/sec assured ; 300 bits/sec normally possible

Operation Asynchronous Interface Connector 25 way D-type connector (specification supplied on request)

Miniaturised Modem

The Datel 200 standard modem needs to be highly flexible so that it can be adapted to work with a variety of computers and terminal equipment under a number of operating conditions. This means that, for any particular application, much of the capability of the modem remains unused. In many cases Datel 200 is only used to connect a simple keyboard and printer terminal to a computer. Typically the computer centre would require its users to originate the telephone call which establishes communication. For such situations a miniaturised modem has been developed which works in conjunction with Datel 200 and provides only those facilities which are needed for this method of working.



The miniaturised modem fits under a standard telephone and can be used over the PSTN or with a private circuit. On any telephone connexion using Datel 200, only one end may be a miniaturised modem. This end will normally originate the call. In many cases it is possible to power the modem from the telephone line.

Maximum temperature 30°C on all sides of the unit

Modulation Frequency shift keying Mode Full duplex

Line 2-Wire PSTN : 2-Wire Private Circuit

Data Rate Up to 200 bits/sec assured : 300 bits/sec normally possible

Operation Asynchronous Interface Connector 25 way D-type connector (specification supplied on request)

General

Maintenance charges are included in the tariff and apply nationally. Our special services sales representative will be glad to advise on specific requirements.

Please note

We do our best to supply our customers with the apparatus they ask for but we may have to provide apparatus which does not accord exactly with the descriptions and illustrations in this leaflet.

For more information ring or write to the special services section of your local Telephone Sales Office. The address and Telephone Number are shown in the preface of your Telephone Directory.