ICL

2903 Range

7500 Modular Terminal Systems

Stand alone or interactive operation

Remote printing and job entry

A range of terminal software



2903 Range

Multi-purpose terminals

Efficient distributed computing capabilities
7500 improves the service provided by a 2903 Range data processing system by:

- ☐ Giving user departments instant access to computer power and system facilities.
- ☐ Giving user departments direct access to computer held information.
- ☐ Allowing user departments to input data when and where it arises.
- ☐ Allowing user departments to answer questions efficiently as they arise.

7500 reduces data processing costs
Reduces turnround time.
Improves data accuracy.
Reduces transportation and media costs.
Provides multiple and shared access to computer facilities, making the most effective and economical use of your 2903 Range system.
Provides the advantage of terminal access, whilst minimising line costs.

Multi-purpose terminal systems
The 7500 Range of terminal processing systems offers a series of terminals based on the 7502 processor, which can fulfil a variety of roles in a total computer system:

- ☐ Local transaction processing for preliminary and format validation.
- ☐ Fast access to mainframe files, providing data access and control facilities where and when they are needed.
- ☐ The 7500 can also operate in an off-line data capture role where telecommunications costs are uneconomic. This off-line capability also provides a standby should telecommunications facilities fail.
- ☐ Hard copy printing of screen outputs for permanent record purposes.
- ☐ Remote printing facilities for bulk production of mainframe output in the locations which suit business needs.
- ☐ The entry and processing of batch jobs from remote locations.
- ☐ Potential for growth and change of role by the addition of peripheral devices and different control software.
- ☐ System security provided by Personal Identification Devices (PIDS), restricting terminal use to authorised staff only.

Terminal control software
A range of standard control programs, called Terminal Executives is available.
The facilities provided are:

- ☐ Basic control for Visual Display Units and Hard Copy Printers.
- ☐ Local validation of VDU screen input.
- ☐ Formatting of output from the 2903 Range mainframe to a hard copy device.
- ☐ The control of remote printing and job entry from a Visual Display Unit used as a control console.
- ☐ A powerful Terminal Programming Language (TPL) for the development of terminal applications for data validation and correction, arithmetic manipulation and local file access.
- ☐ A range of utilities for the fast transmission of data and VDU screen formats to and from Diskette storage, and off-line capabilities for spooling of remotely input data.
- ☐ All Terminal Executives may be loaded from the 2903 Range mainframe using a Teleload utility or from a local Diskette library, where these facilities are available.

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2903 Range

7502/10 interactive terminal system

Efficient data capture

Rapid access to data files

Wide choice of facilities



2903 Range

Simple and easy communications

7502/10 interactive terminal system
The 7502/10 interactive terminal system provides a powerful transaction processing capability for the 2903 Range. The terminal processor may be located locally or remotely to the mainframe, bringing interactive computing facilities to user departments and management.

Data may be input and validated by Visual Diplay Units sited in the places most convenient for the user. The terminal operator has immediate access to any of the files held by the 2903 mainframe.

Growth potential
Each 7502/10 processor has the capability of connecting up to eight Visual Display Units, giving the potential to grow from a single 7502/10 with, say, two VDU's to a multiple processor system, each with the maximum number of terminals. Up to four Hard Copy Printers may be connected for the local production of screen outputs.
7502/10 may be used in combination with the other systems in the 7500 Range in cascaded mode to form flexible and economic distributed processing networks, using a single line connection to the mainframe.

Choice of facilities by software control
The basic Terminal Executive software provides:

- ☐ Local validation of data as it is input.
- ☐ Control of hard copy generation.
- ☐ Full screen formatting with protected fields for operator convenience.
- ☐ Direct output to Hard Copy Printers from the mainframe, simultaneous with terminal use.
- ☐ A combination of facilities, dependent on the Terminal Executive loaded.

Terminal Executives are loaded from the 2903 mainframe which has full utility and mainframe Executive support for interactive working.
Interactive operation runs in conjunction with the easy to use Enquiry Terminal System (ETS 2) and Multiple Transaction System (MTS and MTS 2), designed for the development of transaction processing systems on the 2903 Range.

Brief specification
The 7502/10 terminal system consists of a basic processor with 12K or 16K bytes of store, to which up to eight terminals and four Hard Copy Printers may be connected. The 7561 Visual Display Units have a screen capacity of 2000 or 960 characters. The 7574/1 or 7576/1 Hard Copy Printers have speeds of 45 or 180 characters per second. Line speeds of 600, 1200, 2400, 4800 or 9600 bits per second may be used for the terminal connections.

Up to two 7502/10 terminal systems may be cascaded with another 7500 Range system.

The 7502/10 system is housed in an attractively styled unit to suit a normal office environment. Matching furniture is provided for the Hard Copy Printers and the Visual Display Units.

All 7500 Range processors and peripherals operate from standard mains electrical supplies.

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2903 Range

7502/15 stand-alone or interactive terminal system

Flexible transaction processing

Terminal Programming Language

Facilities for growth



2903 Range

Multi-function terminals

7502/15 stand-alone/interactive terminal system
7502/15 terminal systems offer a versatile data processing facility to meet a wide range of transaction processing requirements, allowing interactive operation with 2903 Range mainframes or stand-alone use, according to your business operation. Local Diskette storage is provided for holding data, screen formats, user-written routines and terminal software. Diskettes may also be transferred to other 7500 Range systems, directly to 2903 Range.

Efficient data preparation systems can be tailored to suit the needs of various departments, using terminal applications programming (TPL).

Processing power where and when you need it
7502/15 can be sited in locations remote or local to the 2903 Range mainframe.

Mainframe files can be accessed directly from the terminal system operating in interactive mode.

Off-line operation enables data to be transmitted to the mainframe at off-peak times to cut line costs.

A range of facilities for growth

- ☐ Hard Copy Printers for local and low volume mainframe outputs.
- ☐ Line Printers for mainframe output.
- ☐ Cascading of other 7500 systems for multi-function capabilities on one mainframe line.

Terminal Executive software and utilities
A range of Terminal Executives is available to support a variety of operations.

These include:

- ☐ Interactive operation with local validation of VDU screen input, direct output and formatting to hard copy devices.
- ☐ The development of terminal applications using TPL.
- ☐ The printing of bulk output on a Line Printer working remotely.

Utilities are provided to carry out data manipulation tasks such as:

- ☐ Diskette copying.
- ☐ Transferring files from the mainframe to Diskette storage.
- ☐ Printing the contents of a Diskette.
- ☐ Selecting and loading a Terminal Executive library stored on Diskette.

Brief specification
The basic 7502/15 consists of a terminal processor with 16K bytes of store, enhanceable to 28K or 40K bytes, according to the Terminal Executives required.

Up to six 7561 Visual Display Units with 2000 or 960 character screens and four 7574/1 or 7576/1 Hard Copy Printers (45 or 180 cps) may be connected. Line speeds of 600 to 9600 bps.

The system includes a 7551/12 Dual Diskette drive housed in the same unit as the 7502 processor.

Each Diskette has a capacity of 256K bytes.

For bulk output, a 7525/02 Line Printer may be connected, operating at speeds up to 300 lpm and having 132 print positions. Print barrels with a 64 character repertoire are available in English or foreign language character sets.

For system security, a Personal Identification Device (PID) is provided.

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ICL

2903 Range

7502/20 remote printing terminal system

Efficient distributed computing

User flexibility

Terminal Programming Language



2903 Range

Multi-purpose terminals

7502/20 remote printing terminal system
The 7502/20 terminal system provides a fast and economical facility for bulk printing in locations remote from the 2903 Range mainframe. User departments, branch offices and depots can be supplied with the urgent computer listings they require for efficient business operation.
Terminal printing is controlled by a Video Console.

Expandable systems to meet changing business needs
7502/20 may be enhanced with further Visual Display Units and Hard Copy Printers, allowing stand alone or interactive terminal operation for transaction processing or file enquiry. Diskette storage may also be added to the system, providing a data or output spooling capability.

Flexible terminal software
The 7502/20 system uses a basic Terminal Executive to control the operation of remote printing using a Visual Display Unit as a console device.
When additional Visual Display Units are fitted, the 7502/20 uses the Terminal Executives for basic control of Visual Display Units and Hard Copy Printers.

For the development of other user-oriented application programs, the flexible Terminal Programming Language (TPL) is available.
Utility software is also available, giving the system considerable operational flexibility. These include:

- ☐ Diskette to mainframe transfers.
- ☐ Mainframe to Diskette transfers.
- ☐ Diskette copying.
- ☐ Terminal Executive selection and loading from a library held on Diskette.

Brief specification
The basic 7502/20 system includes a processor with 16K bytes of store, enhanceable to 28K or 40K bytes, according to the Terminal Executives required.
A 7556/1 Video Console and keyboard is included with each basic system, for controlling the terminal operation. A further five 7561 Visual Display Units with 2000 or 960 character screens may be connected to the 7502/20 system, in addition to four 7574/1 or 7576/1 Hard Copy Printers operating at 45 or 180 characters per second.

The 7502/20 uses the 7525/02 Line Printer for remote printing. This unit operates at speeds of up to 300 lines/minute, has 132 print positions and uses print barrels with a 64 character repertoire in English or foreign language character sets.
System security for 7500 Range is provided by Personal Identification Devices (PID), restricting the use of facilities to authorised staff only.
A 7551/12 Dual Diskette unit may be added as an option. Each drive has a capacity of 256K bytes. 7502/20 may be cascaded with up to two other 7500 Range systems. These form an economic multi-function connection to the 2903 Range mainframe.
All 7500 Range systems operate in a normal office environment and use standard electrical mains supplies. The processor and Diskette drives are housed in an attractively styled, free-standing unit. Matching furniture is available to carry Visual Display Units.

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2903 Range

7502/25 remote batch terminal system

Efficient remote processing

Comprehensive basic software

Operational flexibility



2903 Range

Multi-function terminals

7502/25 remote batch terminal system
The 7502/25 terminal system gives a complete batch processing capability to areas of a business organisation remote from the 2903 Range mainframe. Users are able to control their own input, and distribution of line printer output, to suit their local needs.

A Dual Diskette drive may be added, enhancing the capability of the system to interchange data and terminal software with the mainframe and other 7500 Range systems.

Distributed processing
7502/25 systems in combination with a 2903 Range mainframe provide powerful distributed processing networks in branch offices, user departments and depots.

Up to two other 7500 Range systems may be connected to 7502/25, giving multi-function capabilities on a single line connection to the mainframe.

Flexible terminal software
7502/25 uses a basic Terminal Executive to control the operations of Remote Job Entry and printing using the Video Console.

Terminal software can be loaded remotely from the 2903 Range mainframe or locally from Diskette storage.

Utility software is provided to give the system considerable local operational flexibility. This includes:

- ☐ Diskette to mainframe transfers.
- ☐ Mainframe to Diskette transfers.
- ☐ Diskette copying.
- ☐ Selecting and loading Terminal Executives from a library held on Diskette.

Brief specification
The basic 7502/25 system has a processor with 16K bytes of store.

A 7556/1 Video Console and keyboard is included with each basic system.

The 7502/25 system uses a 7533/11 Card Reader for the input of standard 80 column cards at speeds of up to 300 cards per minute. This unit is desk top mounted and has a hopper capacity of 450 cards for both input and output.

For remote printing a 7525/2 Line Printer is used. This unit operates at speeds of up to 300 lines per minute, has 132 print positions and can use print barrels with a 64 character repertoire in English or foreign language character sets. Multiple-part printer stationery can be used.

For added operational flexibility, a 7551/12 Dual Diskette drive unit may be added as an option. The drive uses Diskettes, each of 256K bytes capacity, and has a transfer rate of approximately 30K bytes per second.

System security for the 7500 Range is provided by a Personal Identification Device (PID). This is associated with the operation of the Video Console, restricting the use of facilities to authorised staff only.

All 7500 Range systems operate in a normal office environment and use standard electrical mains supplies.

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2903 Range

You can link your 2903 Range to IBM computers

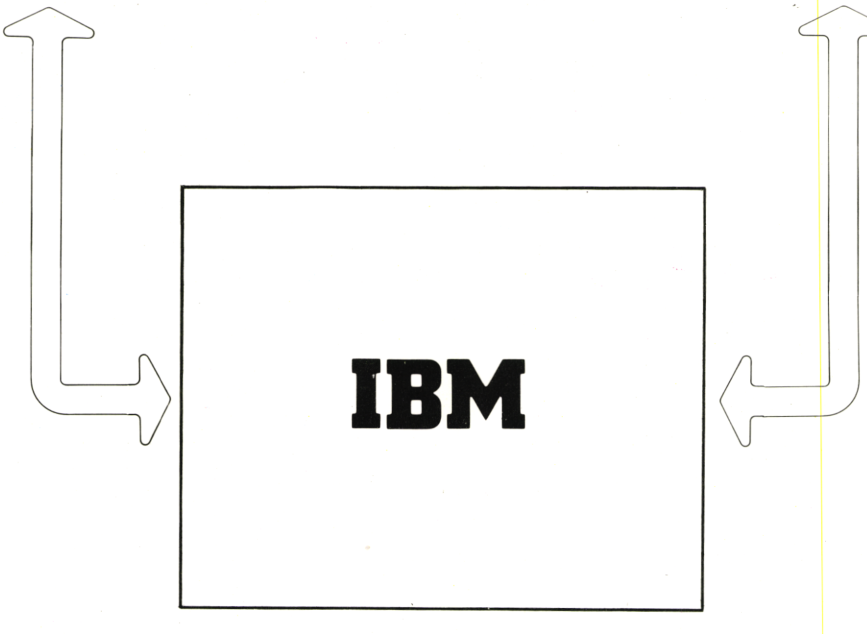
ICL computer power where you need it

Economic and efficient links

Uses IBM 2780 procedures







2903 Range

Powerful satellites to IBM computers

Powerful satellites to IBM systems
IBM users benefit from the many advantages of 2903 Range systems using the communication facilities for linking with IBM 360/370 and System 3 computers.

Using a 2903 Range utility program, the system emulates the full facilities of an IBM 2780 terminal.

2903 or 2904 computers can act as a network of distributed processors to an IBM mainframe, providing the remote locations with the extensive local computing facilities of the 2903 Range.

There are already many IBM users that have built highly successful distributed processing networks with large numbers of 2903 Range systems.

IBM 2780 emulation
2903 Range computers emulate IBM 2780 procedures using a utility program. This operates as one of a number of programs running concurrently under the control of the Executive 1, Executive 2 and Executive 3 operating systems.

The 2903 Range system reacts to the IBM processor as an IBM 2780 terminal device. The 2903 overlaps its own processing with inward and outward data transmission. Connection of the two processors is made via standard dial up or private telephone lines.

USASCII line codes are used for the line transmission. The translation between USASCII line codes and the internal IBM EBCDIC is a standard feature of IBM communications software. The 2903 may be linked to the following IBM equipment in point-to-point mode:

360 and 370 Systems
System 3
2780 terminals

Support for this connection is provided by the following IBM software:

IMS
BTAM
TCAM
VTAM
HASP

Facilities available
In addition to the standard 2903 facilities, the following functions are available from a 2903 linked to IBM equipment:

- ☐ Emulation of all 2780 peripherals (Card Reader, Line Printer, Card Punch).
- ☐ Multiple record transmission.
- ☐ Printer horizontal format control.
- ☐ Terminal identification.
- ☐ Point-to-point line procedures.
- ☐ Automatic turn-around.
- ☐ Line speed from 600 to 4800 bits per second.
- ☐ 2780 operator functions implemented via the 2903 Video Console.

Card Reader options
Card input data may be obtained from:

- ☐ An on-line Card Reader.
- ☐ Via 2903 spooling from a Card Reader.
- ☐ Via 2903 spooling from the DDE system.
- ☐ Via 2903 spooling from the output of a batch program.

Data to be transmitted normally conforms to the 2903 64 character set. Optionally, cards may be read in 2780 USASCII card codes supporting the 128 character set used by IBM data preparation equipment.

Card Punch options
Card Punch data may be output:

- ☐ Via the spooling system to a Card Punch.
- ☐ Via the spooling system as input for a subsequent batch program.

Data received will be interpreted into the 2903 Range 64 character set. Lower case characters will be treated as upper case.

Print data options
Information to be printed may output:

- ☐ To an on-line printer (132 print positions).
- ☐ Via 2903 spooling to a Line Printer.

Data conversions will be as for card punch data.

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2903 Range

Efficient HASP multileaving procedures

Powerful satellites to IBM computers

Computer power where you need it

Flexible communications links





IBM



2903 Range

Flexible, controllable computer power

Implementation
Communication between the ICL 2903 Range and IBM processors using HASP multileaving procedures is implemented by means of a 2903 utility program and associated microcode.

The program operates as one of a number of programs running under control of 2903 operating systems Executive 1, Executive 2 or Executive 3. It allows operation of the ICL 2903 Range system as an RJE terminal offering job input and output facilities and interactive use of the 2903 Range console to the IBM operating system for the purpose of job control and interrogation.

EBCDIC line code is used for transmission and all required code conversion is carried out by the 2903 program.

The ICL 2903 Range systems may thus be linked to IBM 360 and 370 systems using operating systems which support HASP multileaving protocol, including the following:—

- HASP with OS/MFT and OS
- MVT ASP with OS MVT
- JES/RES with OS/VS1
- HASP II version 4 with OS/VS2 (Release 1)
- JES 2 with OS/VS2 Release 2 (MVS)
- JES 3 with OS/VS Release 2 (MVS)

2903 Range HASP multileaving workstation characteristics
The ICL 2903 HMW facility supports the following peripherals in a real or spooled fashion:

Card Reader
Card data may be obtained:
- From an on-line Card Reader.
- Via the 2903 Range spooling system from Card Reader.
- Via the 2903 Range spooling system from Direct Data Entry devices.
- Via the 2903 Range spooling system from output of a previous batch program.

Data transmitted normally conforms to the ICL 64 character set, all code conversions being carried out by the program. Optionally, cards may be read in IBM EBCDIC card code.

Line Printer
HASPGEN parameters can specify variants up to and including 132 character print width.

The program will output printer data to:
- An on-line printer.
- Via the 2903 Range spooling system to a printer.
- Via the 2903 Range spooling system to subsequent batch program.

Card Punch
Card punched data may be output to:
- An on-line Card Punch.
- Via the 2903 Range spooling system to a Card Punch.
- Via the 2903 Range spooling system for use as input to a subsequent batch program.

Video Console
Job control and interrogation messages to and from the host computer are displayed using the status area of the 2903 Range Video Console.

Features
The following features are available with the ICL 2903 Range HMW facility:
- ☐ Built-in SIGNON.
- ☐ Full HASP compression and decompression.
- ☐ Device concurrency:
- ☐ Transmission block buffering.
- ☐ Diagnostic tracing.
- ☐ Self Test Facility.
- ☐ Line speeds from 600 to 9600 bps.

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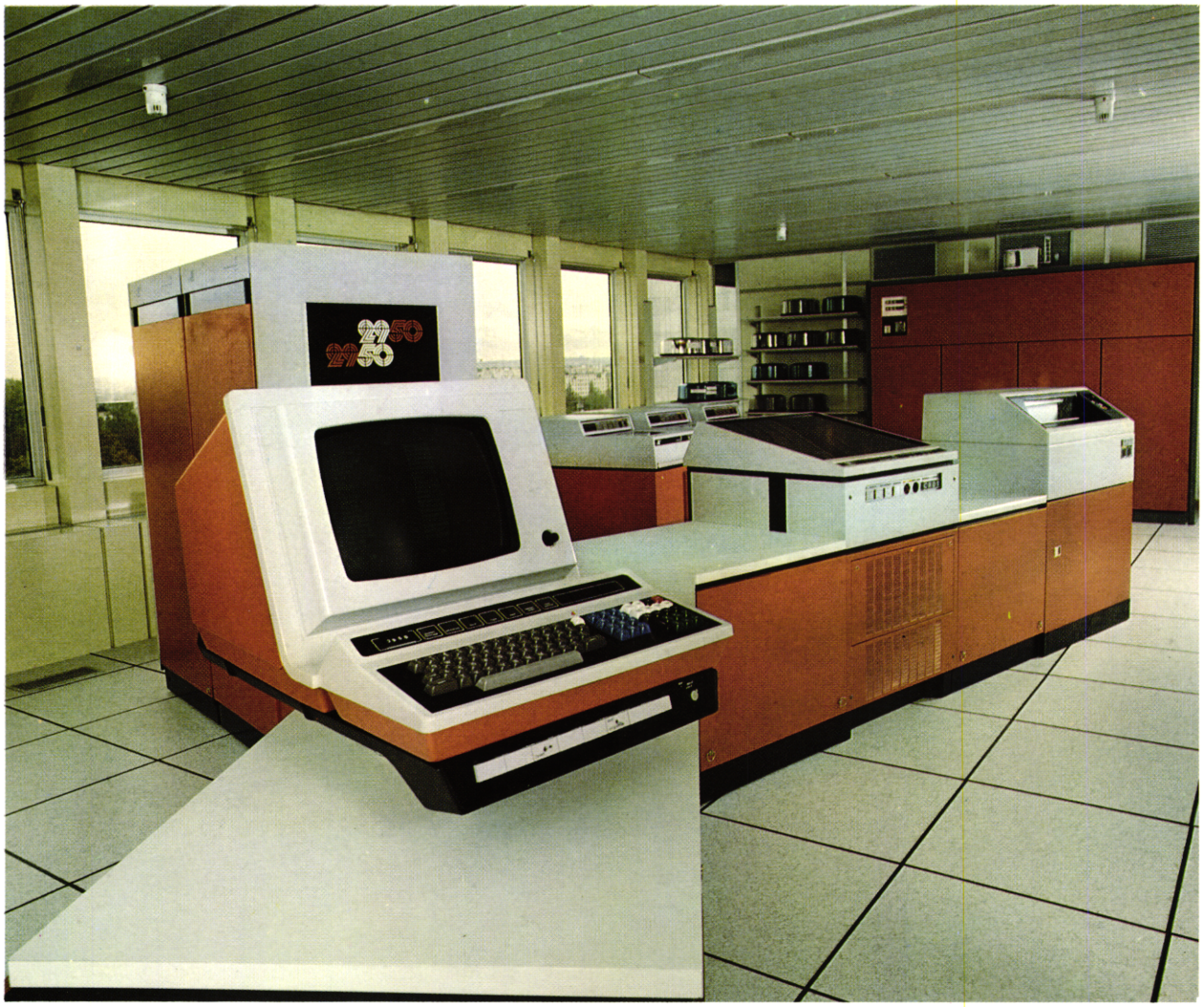
2903 Range

The growth to larger 2900's

Additional power

Software investment protected

Ease of transition



2903 Range

Grow at your own pace

Growth potential
The 2903 Range is designed to cater for the growth of a customer's workload and requirements. The smallest 2903/25 system may be enhanced on site to the largest 2904/50.

This is achieved by:
- ☐ Common architecture.
- ☐ Common peripherals.
- ☐ Compatible software environments.

From 2903 Range upwards
Growth into the larger 2900 Series products is an essential part of ICL's design philsosophy and product plan.

Architecture
The connectivity of peripheral and communications devices is achieved by use of a new Peripheral Highway; using hardware common to both 2903 Range and the larger 2950 system. This permits connectivity of devices such as:
LP 720 Line Printer
SMLCC (Synchronous Multi-Line Communications Coupler).

Operating environment
The 2903 Range user has a choice of Executives:
Executive 0
Executive 1
Executive 2
Executive 3
These are upward compatible and represent increases in the facilities available.

Executive 3 offers the user many facilities from DME (Direct Machine Environment) offered on 2950. This aids smooth software transition and maintains the user's investment in software systems from his 2903 Range processor.

2950 has compatible language compilers for COBOL, FORTRAN and RPG 2.

A wide range of software utilities are common to 2903 Range Executives and 2950 DME.

Communications software
The 2950 DME system will provide for the portability of 2903 Range communications software products.

Protection of investment
This is assured by enabling you to:
- ☐ Bring your programs from the 2903 system to the 2950.
- ☐ Transfer data files to the 2950 maintaining your file organisation and maintenance procedures.
- ☐ Transfer certain peripheral equipment to the 2950.
- ☐ Utilise the expertise and experience of your computer staff with minimal additional training.

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ICL

2903 Range

2510/11 Magnetic Tape System

High speed data transfer

Automatic tape loading

International standard data formats



2903 Range

Fast, efficient magnetic tape handling

Magnetic Tape file storage systems on the 2903 Range are provided for by the ICL 2510/2511 9-track Magnetic Tape System. The system consists of a Magnetic Tape Control and from one to six Magnetic Tape transports. The first transport is integrated with the Tape Control (2510). Up to a maximum of five additional transports (2511) can be added.

Systems with less than the maximum number of transports can be enhanced on-site.

Data transfer is at a rate of 80K characters per second maximum.

Each transport has automatic tape loading, and is fitted with long-life read/write tape heads.

Standard recording mode is Phase Encoded (PE), with NRZI as an additional option. When the NRZI mode option is fitted, the recording mode of the system is controlled by a manually operated switch on the 2510 Control Unit.

All tape transports have high speed tape rewind and will read and write tapes prepared in accordance with International Standards for data interchange.

Specification

Tape width:
1.27 cm (0.5in)
Number of recording tracks:
9
Tape speed:
95.25 cm/sec (37.5in/sec)
Recording mode:
Phase Encoded (NRZI optional)
Packing density:
1600 rpi – PE
(800 rpi – NRZI)
Data transfer rates:
80 Kch/sec or 40 Kch/sec
Rewind speed:
381 cm/sec (150 in/sec)
Automatic loading:
26.7 cm (10.5 in spools only)

Dimensions

Magnetic Tape Control and Integrated Transport 2510/01, 2510/61
Width: 154 cm (61in)
Depth: 66 cm (26in)
Height: 70 cm (27½ in)
Weight: 187Kg (412lb)

Magnetic Tape Control and Integrated Transport 2511/01, 2511/61
Width: 154 cm (61in)
Depth: 66 cm (26in)
Height: 70 cm (27½ in)
Weight: 160 Kg (352lb)

Power supply

2510/01, 2511/01:
220-240v 50Hz
2510/61, 2511/61:
110-220v 60Hz

Software support

The 2510/2511 Magnetic Tape system is supported by Executives 1, 2 and 3.

2510 attachment

Via a 2903 Range Standard Interface Coupler.

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2903 Range

Exchangeable disc drives

Full random access

30 and 60 million characters

Full compatibility



2903 Range

Large on-line data storage

Exchangeable Disc Storage
For 2903 Range systems requiring larger on-line disc storage the fully exchangeable EDS30 and 60 devices are available. These may be used either in addition to FEDS devices or where the smaller capacity discs are not required.

Specification

EDS30
Data capacity:
30.7 million chars
Track capacity:
7,680 characters
Cylinder capacity:
151,552 characters
No. of tracks:
203
Peak transfer rate:
416,000 chars/sec
No. of discs:
11
No. of recording heads:
20
Latency:
25m sec
Average latency:
12.5m sec
Average random seek:
35m sec
Average access:
47.5m sec
One track seek:
10m sec

EDS60
Data capacity:
61.5 million chars
Track capacity:
7,680 characters
Cylinder capacity:
151,552 characters
No. of tracks:
406
Peak transfer rate:
416,000 chars/sec
No. of discs:
11
No. of recording heads:
20
Latency:
25m sec
Average latency:
12.5m sec
Average random seek:
35m sec
Average access:
47.5m sec
One track seek:
10m sec

Dimensions

EDS30/60
Width: 71.1cm (28in)
Depth: 96.5cm (38in)
Height: 96.5cm (38in)
Weight: 318Kg (700lb)

Disc cartridge canister
Diameter: 38cm (15in)
Height: 15.2cm (6in)
Weight: 6.8Kg (15lb)

EDS30 drives can be enhanced, on-site, to EDS60.

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2903 Range

Directly connected Diskette drives

Additional user flexibility

Data interchange capability

IBM data exchange format



2903 Range

Increased flexibility in terminal networks

Directly connected Diskette drives
The 2903 Range has the ability to connect a 2830/12 Dual Diskette drive to the mainframe. This means that the 2903 Range user with 7502 Range terminals has additional flexibility in operating his terminal network. Diskettes may be created or read directly by the mainframe, without the need for communications links, which may in many cases be uneconomic. The 7502 system can operate in a genuinely stand-alone mode, but with the power of mainframe directly accessible.

Economic data interchange
The 2830/12 Diskettes have a recording format identical to that used for the 7502 Range. Data captured by a 7502 may be read directly by the mainframe drive as an alternative to transmitting over a communications link. This facility may be used for jobs that are not time critical or where a large number of data sources make many transmission links uneconomic. The system can also serve as a back up facility when line failures occur.

Diskettes may be created by the mainframe for screen formats and reference files. These may subsequently be transported to the terminal systems, providing central control for a stand-alone network.

IBM compatibility
The format of recording used enables data generated by IBM data exchange devices to be read by the 2903 Range mainframe. This means that a 2903 or 2904 can become the central processing facility for a network of these systems without the need for replacement of the IBM data exchange devices.

Utility software
The Diskette drives interface with other system facilities by means of two special utility programs.

Data is transcribed to and from the Diskette using an existing formatted disc file which can be accessed and processed using RPG 2 or COBOL.

The other utility functions provided are:

- ☐ Diskette to Diskette copying for security and duplication.
- ☐ File copying.
- ☐ New file creation.
- ☐ File listing facility providing line printer output.
- ☐ Diskette print facility.
- ☐ File renaming.

Brief specification
The 2830/12 Dual Diskette drive is housed in a freestanding cabinet matching the processor and other peripheral devices.

The cabinet is sited close to the central processor or FEDS unit. The drive is connected to the 2903 Range mainframe via the Peripheral Highway.

The Diskette recording format conforms to the provisional ECMA Standard providing compatability with IBM Diskettes.

Data is recorded on one side only in 77 concentric tracks of which only 75 are available for use. A track is sub-divided into 26 sectors, each containing a header and a 128 byte data block. Two of the 75 tracks are used by the system, thus allowing a data recording capacity of 242, 944 bytes.

The disc rotation speed is 360(±3.5%) revs per minute, giving a data transfer rate of approximately 31.25K bytes per second.

Foreign character sets are available in addition to the standard English version.

Dimensions
Width: 60cm (23½ in)
Depth: 75cm (29½ in)
Height: 71cm (28in)
Weight: 85Kg (187lb)

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