



# 2.5 MB Removable Cartridge Disc System

## PRODUCT DESCRIPTION

Interdata's 2.5 megabyte Removable Cartridge Disc System is a low-cost, random access bulk storage subsystem for use with Interdata's family of 16- and 32-bit computer systems. The basic subsystem provides a formatted storage capacity of over 2.5 million bytes with an expansion capability to over 10.02 million bytes with the addition of up to three removable cartridge disc drives.

Included with the basic subsystem is a 2.5 megabyte disc drive, fully formatted disc cartridge, power supply, cables and controller capable of controlling four removable cartridge disc drives.

## FEATURES

- 2,506,752 Byte Formatted Capacity
- Expandable to 10,027,008 Million Bytes
- 33 Millisecond Average Seek Time
- 12.5 Millisecond Average Rotational Latency
- 195,250 Bytes Per Second Transfer Rate
- Hardware Write Protect

## OPERATIONAL CHARACTERISTICS

The 2.5 Megabyte Removable Cartridge Disc System uses an IBM type 2315 two recording surface Disc Cartridge with a nominal formatted capacity of 2.5 megabytes. The exceptionally fast and accurate head positioning mechanism allows radial positioning of the two heads to any one of the 204 available cylinders.

The average positioning time is 33 milliseconds, track to track 10 milliseconds and a maximum full stroke of 60 milliseconds.

The rotation speed is a highly accurate 1500 RPM using a DC brushless motor that is impervious to line power variations. Data transfers at a rate of 195,250 byte per second using a standard Interdata selector channel for autonomous direct memory access. Data security and integrity are assured by the use of extensive error detection logic in the controller, a constant revolution DC powered spindle, disc cleaning brush assembly to minimize particle contamination, head positioning limiter and power loss protect circuits causing the heads to be fully retracted, and a positive cartridge interlock mechanism preventing removal of the cartridge until fully stopped.

The controller is a standard Interdata 15 x 15 inch printed circuit board that may be inserted into any standard Interdata chassis. The disc drive unit is mountable in a standard Interdata cabinet or RETMA rack.

The 2.5 Megabyte Removable Cartridge Disc subsystem is fully supported by Interdata's powerful OS/16MT2 and OS/32MT Operating System. In addition, the disc subsystem is supported by higher level languages such as FORTRAN, COBOL and BASIC II.

### INTERDATA PRODUCT NUMBERS

- M46-611**     2,500,000 Byte Removable Cartridge Disc System. Disc Transfer rate is 195,250 bytes per second, average access time is 33 milliseconds. System includes disc drive controller for up to four drives, 2,500,000 byte disc drive, fully formatted disc cartridge, power supply, cable and mounting hardware. 60 Hz.
- M46-612**     Same as M46-611. 50 Hz.
- M46-613**     2,500,000 Byte Removable Cartridge Expansion Disc. Includes disc drive, fully formatted disc cartridge, cable and mounting hardware. 60 Hz.
- M46-614**     Same as M46-613. 50 Hz.

### SPECIFICATIONS

#### Capacity

Bit Density	2200 bits per inch
Track Density	100 tracks per inch
Cylinders	204
Tracks Per Cylinder	2
Bytes Per Sector	256
Sectors Per Track	24
Formatted	2,506,752 bytes

#### Access Times

Average Access Time	33 milliseconds
Average Rotational Delay	12.5 milliseconds

#### Rotational Speed

1500 RPM

#### Data Transfer Rate

195,250 bytes per second

#### Disc Cartridge

IBM 2315 type

#### Dimensions

Height	7 inches (17.8 cm)
Width	17.6 inches (44.7 cm)
Depth	22 inches (55.9 cm)
Controller	15 x 15 inch (38.1 x 38.1 cm) printed circuit board
Weight	95 pounds (43 kg)

#### Power

Disc Drive	120 VAC, 3.3 amperes, 47-63Hz single phase, starting current 12 amperes
	230 VAC, 1.7 amperes, 47-63 Hz single phase, starting current 6 amperes.
Controller	+5 VDC, 4.5 amperes

#### Environmental

Temperature	50° to 100°F operating
Humidity	10 to 80% RH no condensation

The information contained herein is intended to be a general description and is subject to change with product enhancement.