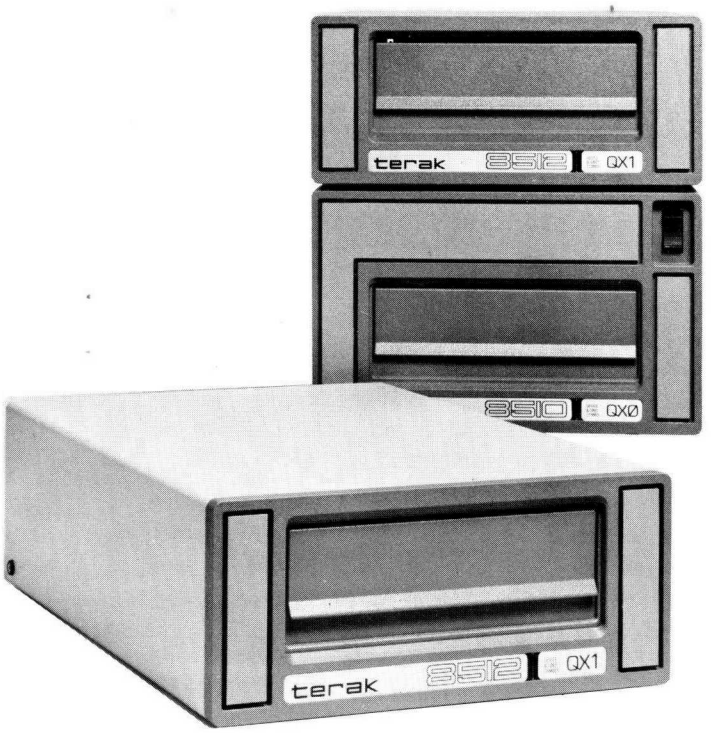
terak® 8512 FLEXIBLE DISK SUBSYSTEM



- **Single Drive-at-a-Time Expansion Capability**
- **Completely Self-Contained**
- **IBM 3740 Format**
- **Modular Design**

FEATURES

The TERAK 8512 is the companion to the TERAK 8510 DATA PROCESSOR. The 8512 is a direct access mass memory device providing single drive expansion capability in a stand-alone module. The 8512 utilizes flexible magnetic disks as its storage medium, in IBM 3740 compatible data format. The basic 8512 unit consists of a single disk drive unit, power supplies, A.C. line filter and cord receptacle, air cooling and filtration system and externally accessable connectors for interconnect with the 8510 DATA PROCESSOR and daisy chain connection to additional 8512 units.

IBM compatibility is achieved by means of identical read/write/erase head geometry, head positioning to meet precise track location requirements, equivalent recording levels and compatible bit packing densities on all tracks.

Fast data throughput — with high reliability — is assured through head positioning accuracy, superior read/write circuitry and overall mechanical design. Precision machined, single piece, cast aluminum frame and rigid, cast carrier mechanism provide long lived, dependable operation. A wide mouth, bistable door facilitates media loading. Diskette protection is provided by a mechanical interlock preventing door closure if the diskette is not properly inserted. Gentle handling of the diskette is achieved through use of an expandable clutching system. A ceramic read/write/erase head is standard on the 8512, providing extended head and media life.

Reduced power consumption and longer component life are achieved by applying an at-rest voltage of only 5 volts to stabilize the stepping motor. A short duration 24 volt pulse, applied during the Track-to-Track stepping operation, provides rapid response and cooler operation. When the +5 VDC drops below 4.3 VDC, all write circuitry is deactivated to prevent inadvertant writing or erasing of data.

The 8512 units are stackable and are housed in a cabinet whose styling and color matches the 8510 DATA PROCESSOR. Installation consists of merely connecting the A.C. power line cord, connecting a daisy chain flat ribbon cable between the 8510 and 8512 (or 8512 to 8512) and moving a pluggable system terminator to the last drive in the daisy chain. There are no operator switches on the 8512; power is controlled from the 8510 as are all control signals.

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SPECIFICATIONS

Diskette	IBM 3740 Format Compatible	
	Capacity 1.94 × 10^6 bits, IBM Initialized Disk	
	Capacity/track 26,624 bits, IBM Initialized Disk	
	Bit Density (inner track) 3,268 BPI	
Drive	Rotational Speed	360RPM ± 2.5%
	Average Latency	83.3 ms
	Access Time	6 ms Track-to-Track 24 ms Head Settle 176 ms Random Access
	Head Load Time	50 ms
	No. of Tracks	77
	Track Spacing	48 Tracks/inch
A.C. Power Requirements .	105,120,220,240 VAC @ 50/60 Hz 105 watts typical	

Environmental ...	Temperature, Operating +40°F to +90°F with Media Temperature, Storage −30°F to +150°F without Media Humidity 20% to 80% R.H. (non-condensing)	
Reliability	Read error rate: less than 1 in 10^9 bits Unrecoverable read error rate: Less than 1 in 10^{12} bits Head Life: 30,000 contact hours Media Life: Greater than 10 × 10^6 passes per track on approved media	
Physical:	Height	5.5 in. (14.0 cm)
	Width	12.2 in. (31.0 cm)
	Depth	18.0 in. (46.0 cm)
	Weight	30 lbs. (13.6 kg)