8433 Disc Storage Subsystem



The SPERRY UNIVAC™ 8433
Disc Storage Subsystem is the largest capacity Sperry Univac removable direct-access storage subsystem. It provides large database storage for teleprocessing and management-information systems. An average head positioning time of 30 milliseconds provides the speed necessary for future throughput requirements.

The complete subsystem consists of a SPERRY UNIVAC 5039 Control Unit and from two to sixteen SPERRY UNIVAC 8433 and/or 8430 Disc Storage drives intermixed in the subsystem (16-drive expansion feature required to address the second group of eight drives). In addition to the removable disc storage drives, the 5039 Control Unit can attach the 8405 Fixed-Head Disc (FHD) Drive

(via F2076 8405 capability). The maximum configuration with FHD is from one to eight 8405 FHD drives and from two to eight 8433 and/or 8430 Disc Storage drives. Each 8433 consists of a single spindle mounted in a slim-line cabinet which permits simplified subsystem expansion to multiple spindle configurations with minimal floor-space requirements. The convenient waist-high disc-pack loading facilitates easy load/unload operations.

The SPERRY UNIVAC 8433 Disc Storage drive accepts the industry-standard disc pack which stores 200 million bytes or 34,388,480 36-bit words. Thus, depending on specific requirements, it is possible to have up to 3.2 billion bytes or 550,215,680 36-bit words of storage per subsystem. A data-transfer rate of 806,000 bytes per second allows for improved systems performance capability. Simultaneous read/read, read/write or write/write operations can be performed on any two disc drives via a second control unit and appropriate features.

Error correction codes (ECC) and improved diagnostics are provided as standard features in the 8433 subsystem. Error correction codes are used to detect and correct data errors, thereby increasing reliability.

With the addition of the 8433, Sperry Univac adds another high-performance device to its line of mass storage devices. Contact your local Sperry Univac representative for further details.





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COLORS¹

Standard Colors

Frameslate gray Front/rearpale gray

Customer Color Selection²

End panels dark green slate gray twilight blue earth brown grayish blue

¹This is the color repertoire: Definition of these colors is given in Color Selection Brochure U5329, which your Sperry Univac representative has available.

²End panel color selections not available on all systems. Consult your Sperry Univac representative for details.

FUNCTIONAL CHARACTERISTICS (PER DRIVE)

Data Capacity (8-bit bytes, one record per track, Free Format)

Disc Drive 200,036,560 bytes

Controller (16 disc drives) 3,200,584,960 bytes

Track (one record per track) 13,030 bytes

Data Capacity (36-bit words) (112 word record format)

Disc Drive 34,388,480 words

Controller (16 disc drives) 550,215,680 words

Track

(20 records per track) 2,240 words

Transfer Rate 806,000 bytes/sec.

Data Heads

19 per disc drive

Tracks

19 per cylinder 15,485 per disc drive (includes 133 spares)

Cylinders

815 per disc drive (includes 7 spares)

Head Positioning Time

10 ms minimum 30 ms average 55 ms maximum

Rotational Latency

8.33 ms average 16.67 ms maximum

Rotational Speed 3,600 RPM

PHYSICAL CHARACTERISTICS (PER DISC STORAGE UNIT)

Width: 22 inches Height: 40 inches Depth: 32 inches Weight: 500 pounds

ENVIRONMENTAL CHARACTERISTICS

Shipping and Storage Range (Up to 72 hours)

Temperature -40°F to +140°F Humidity 5% to 90%

72 hours to 6 months Temperature 50°F to 110°F Humidity 8% to 85%

Working Range:

Temperature 60°F to 90°F Humidity 20% to 80% with maximum wet bulb temperature not to exceed 78°F

Heat Dissipated 5,500 BTU

POWER REQUIREMENTS

Nominal Voltage: 208/230 volts

Nominal Frequency: 60 Hz³

Frequency Tolerance + 1.0 Hz

Phases and Lines:

Three phase, 4 wire

Nominal Load: 1.8 KVA

350 Hz models available.

Above information provided for reference purposes only. Consult your Sperry Univac representative for additional information, delivery dates and further specifications.

