

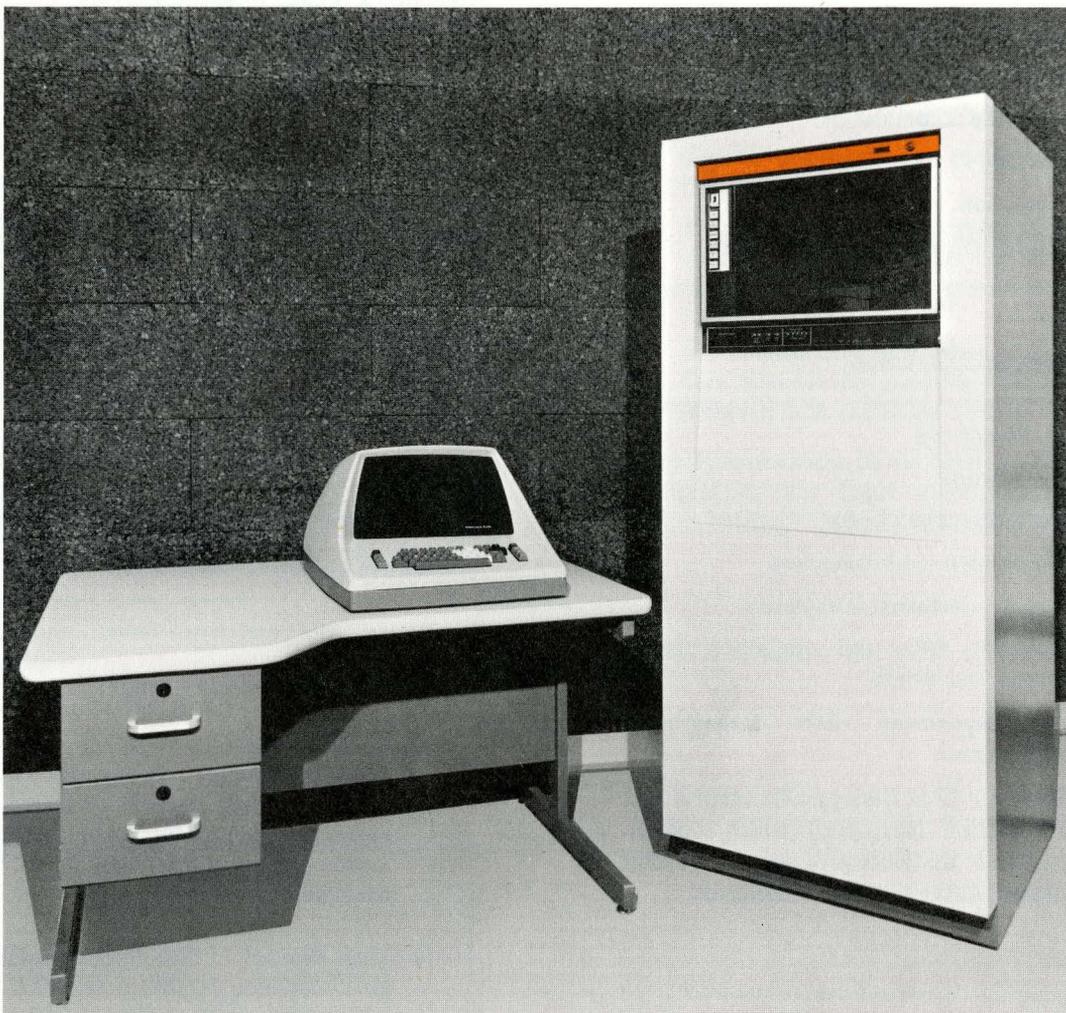
# ENTREX SYSTEM 280 DESCRIPTION

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## GENERAL

System 280 is the ENTREX shared-processor data entry system for the following market segments:

- Entry-level (from keypunch and key-tape equipment),
- Price sensitive key-to-disk users,
- Low cost, multi-function remote communications terminal.



SYSTEM 280

## SOFTWARE

System operations, from formatting keyed data and generating the CRT display, through data editing and validation, to reformatting data records and writing blocked output to tape (including appropriate labels) are executed under software control. The following is a selected list of standard software features:

- Entry, Verify and Examine modes
- Validate in Supervisor mode
- Input record to 280 characters
- Unlimited program storage
- Search arguments - Record number, error flag, character sequence or field content
- Auto Dup, Skip, Increment fields
- 8 formats per job
- 4 Batch balance accumulators
- Table look-up (7)
- Batch protection
- Two flexibly-defined check digit routines
- Supervisor Access - any keystation, password protected
- Batch interrupt and resume
- Alpha only/numeric only - with customer specified exceptions
- Error flag insertion
- Continuous job status display
- Output blocking to 512 characters
- Range Check - inclusive or exclusive
- Field mandatory entry and completion checks
- Record insert and delete
- Extensive Supervisory data management assistant features

A highlight of System 280 is the operator control and guidance software (HELP lists, etc.) which operate interactively throughout the keying process - thereby reducing errors and increasing operator confidence.

### Optional Software

- Additional check digit routines (3-7)
- Operator analysis package (includes elapsed time clock)
- Batch Edit - provides extensive data control and logical and arithmetic manipulations within a completed batch.

## HARDWARE

**Central Processor:** 1.2 microsecond cycle time, 16-bit word, with 32,768-byte maximum capacity. Power failure detection and automatic restart features are standard.

**Disk Drive:** A two-surface, 1.8 million byte disk provides high-speed intermediate storage for the System 280. An additional module of disk storage may be configured for a maximum of 3.6 million bytes of intermediate storage.

**Tape Drive:** Standard half-inch magnetic tape, capacity up to 1200-feet on 8-1/2" reels. Nine channel 800-bpi (NRZI) or 1600-bpi phase modulation encoding. Reading and writing occur at 25-inches/second, rewind speed is 150-inches/second. Industry standard error checks, including read-after-write checking, are basic magnetic tape features.

**Data/Scope Keystations:** A movable, integrated keyboard/CRT unit. The User can select either an 029 keypunch or a typewriter keyboard layout. Both keyboards include 17 function keys, and the typewriter-style keyboard also has a 10-key numeric pad. System 280 CRT display presents 9 lines of 40 characters. Status and diagnostic error messages appear in the upper two lines, while tags and data are formatted in the lower seven lines. The screen cursor is a blinking rectangle of light which indicates where the next character will appear on the display. The Data/Scope also features operator-adjustable brightness and volume controls.

### Optional Hardware

- Nine channel 1600-bpi alternate tape drive.
- Serial printer - 165 characters-per-second, 132 characters-per-line. Horizontal spacing is 10 characters/inch, vertical, 6 lines/inch. A 63-character print set is formed by a 5 by 7 dot matrix. Form widths from 2 to 14-3/8 inches are acceptable.
- Line Printer - 300 lines/minute, 132 print positions/line, 10 characters/inch horizontal, 6 lines/inch vertical. Paper width can be up to 19.5 inches.
- Line Printer - 600 lines/minute, 132 print positions/line, 10 characters/inch horizontal, 6 lines/inch vertical. Paper width from 3.5 inches to 19.5 inches.

## COMMUNICATIONS

Remote Keystations are provided for those applications where the 1000-foot direct cable connect constraint must be exceeded. Remote Keystations transmit data over a half-duplex switched network or leased lines. Each remote keystation adapter includes an ENTREX-supplied modem which allows transmission up to 1200 bits-per-second.

System-to-System Communications provides System 280 with the ability to communicate with any other Entrex System, or any of the several mainframes (360, 370, Burroughs, etc.) observing Binary Synchronous Protocol and equipped to support the IBM 2780 Remote Batch Terminal. With this capability, ENTREX joins a large and growing number of manufacturers providing the ability to become a plug-compatible IBM 2780 for communications to a mainframe or each other.

## TECHNICAL DESCRIPTION

### Control Group

**Dimension:** 26" wide x 31" deep and 65" high.

**Weight:** 640 lbs.

**Power:** 117 VAC  $\pm$  10%, 15 amps, 60 Hz.

**Controls:** Locking system power switch and momentary contact switches to select cold start and the source of start routines — tape or disk.

### Data/Scope Keystation

**Local Storage:** MOS Shift registers.

**Power:** 117 VAC  $\pm$  10%, 1.6 amps, 60 Hz.

**Data Transmission to central unit:** Serial, phase-encoded, bipolar with excellent noise margins.

**Workstation:** Large usable work area, locking personal effects drawers.

**Dimension:** See Figure 1 (below).

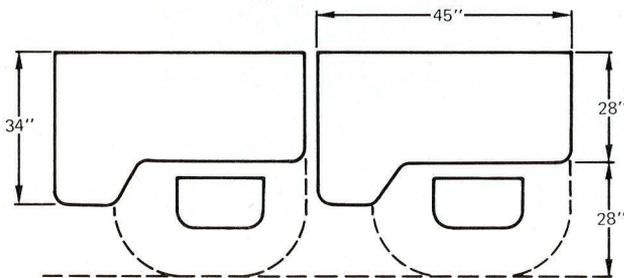


Figure 1. Data/Scope Space Requirements

## INSTALLATION REQUIREMENTS

### Control Group

1. Adequate area for the Control Group allowing easy access to the tape drive and the back of the unit.
2. A single-user power circuit capable of supplying 20 amp service at a Hubbell 7310B wall receptacle.
3. Air conditioning adequate to maintain a temperature between 65° and 80°F and a humidity level between 40% and 80%.

### Data/Scope Keystation

1. Adequate area for the keystation and operator must be provided; see Figure 1.
2. Keystations must be within 1000 feet of the Control Group.
3. Electrical outlets are required to provide 117-volt, AC, 60 Hz, three wire service. A common bonding ground is required between all keystations and the control group.
4. Air conditioning adequate to maintain a temperature between 65° and 80°F and a humidity level between 40% and 80%.

Up to 12 keystations of the same type can be added to a system at any time. Cable raceways are available to cover cabling between Data/Scopes and the Control Group.