RC 851
Display Terminal

- **GENERAL-PURPOSE OR DATA ENTRY TERMINAL**

- **MICROPROCESSOR BASED**

- **APPLIED ERGONOMICS IN DESIGN**

- **2000 CHARACTERS DISPLAY CAPACITY**

- **DATA RATES UP TO 9600 BPS – CCITT V.24 INTERFACE**

GENERAL

The RC851 display terminal is a tty-compatible, scroll and page mode terminal of the RC850 terminal system. It is microprocessor based (Z80A) and factory programmed to the below mentioned characteristics. The terminals can be connected to RC8000, RC3600 and RC7000 host systems as well as other host systems and they make out the modern successors of the RC822B/RC828B terminals.

Applied ergonomics in design substantially has improved the operator's place of work. The noiseless display is based on a large, 38 cm screen and allows for height adjustment and tilting. The detached, low-profile keyboard as well permits the operators to arrange for the proper working conditions individually.

Different national alphabets (96 char.) are available, each based on a 128-character ROM. Keyboards are selected for either standard or RC3600 data entry purposes. All keyboards include a separate numeric cluster. Options in the characteristics can be selected from the keyboard. The display features protected characters controlled by an attribute function assigned to each character position. Built-in diagnostic procedures are automatically executed on terminal start-up.

The communication interface is serial asynchronous (CCITT V.24). Data rates can be from 110 to 9600 bps, controlled from the keyboard. The connection to RC systems is locally supported by multiplexers (RC3682, RC35-104) and by current-loop couplers (RC886/F86); remotely by modems (V.22 and V.23) and by terminal concentrators (RC800-20, RC800-21). A printer can be connected directly to the RC851 terminal.

SPECIFICATIONS

Processors:	Cpu: Z80A (4 MHz); keyboard: INTEL 8035. Self-test feature.
Memory:	Dynamic MOS, RAM and factory programmed EPROM.
Display capacity:	2000 characters in 25 lines, 80 characters each; refresh memory: Static MOS, RAM; refresh rate: 50 Hz. Attribute function on each character position.
Display screen:	38 cm (15-inch) screen, non-glare.
Character image:	Generation: 14×16 dot matrix; size: 6×3 mm (h $\times$ w).
Character sets:	Basically 128 ch from ROM, national alphabets (96 ch): D, DK, F, S, UK, US.
Attribute function:	Protected characters (highlighted).
Cursor:	Position addressable; underline or box (both blinking or steady), user controlled from keyboard. Cursor controls: up, down, left, right, tab., clear (home) and return.
Other controls:	Standard keyboard: select, print on/off, rub out, escape and shift, alpha lock, control; data entry keyboard: 28 additional control keys for special data entry purposes.
Keyboard features:	N-key rollover, auto repeat, adjustable key-click (may be silenced completely).
Indicator:	Program controlled audio-visual indicator (bell code) – may be silenced; visual alpha lock indicator.
Comm. mode:	Full-duplex.
Comm. connection:	CCITT V.24 (RS 232 C), socket confirms to ISO 2110.
Comm. format:	Serial, asynchronous with 1 start bit, 7 data bits, 1 parity bit (even parity), 1 stop bit.
Comm. speeds:	110–9600 bps, controlled from keyboard.
Printer output:	As communications above (connection, format, speeds), controlled by print on/off control characters.
Power requirements:	220/240 V AC $\pm$ 10%, 50 Hz $\pm$ 2 Hz, 80 W
Temperature, amb.:	10–35°C (50–95°F)
Heat dissipation:	288 kJ/h (69 kcal/h, 278 BTU/h)
Humidity:	0–95% relative, non-condensing

DIMENSIONS

	Display	Keyboard
Height:	39–49 cm (15.4–19.4 in.)	8.5 cm (3.4 in.)
Width:	47 cm (18.5 in.)	44 cm (17.3 in.)
Depth:	33 cm (13 in.) non-tilted, tiltable $\pm$ 10°	25 cm (9.9 in.)
Weight:	30 kg (66 lb.)	4 kg (8.8 lb.)