

RC 3000 CONVERTER SYSTEM

The converter system operates a variety of peripheral devices independently of the computer, converting all input and output data to and from magnetic tape. The computer can thus be freed from the necessity of handling large volumes of data on low-speed peripherals, provided it is equipped with on-line magnetic tape stations.

The converter itself, which is available in two models, the one for 7-track and the other for 9-track standard magnetic tape, consists of a paper tape reader (RC 2000), a control unit with a buffer store for 1024 8-bit characters, and a magnetic tape station (RC 707

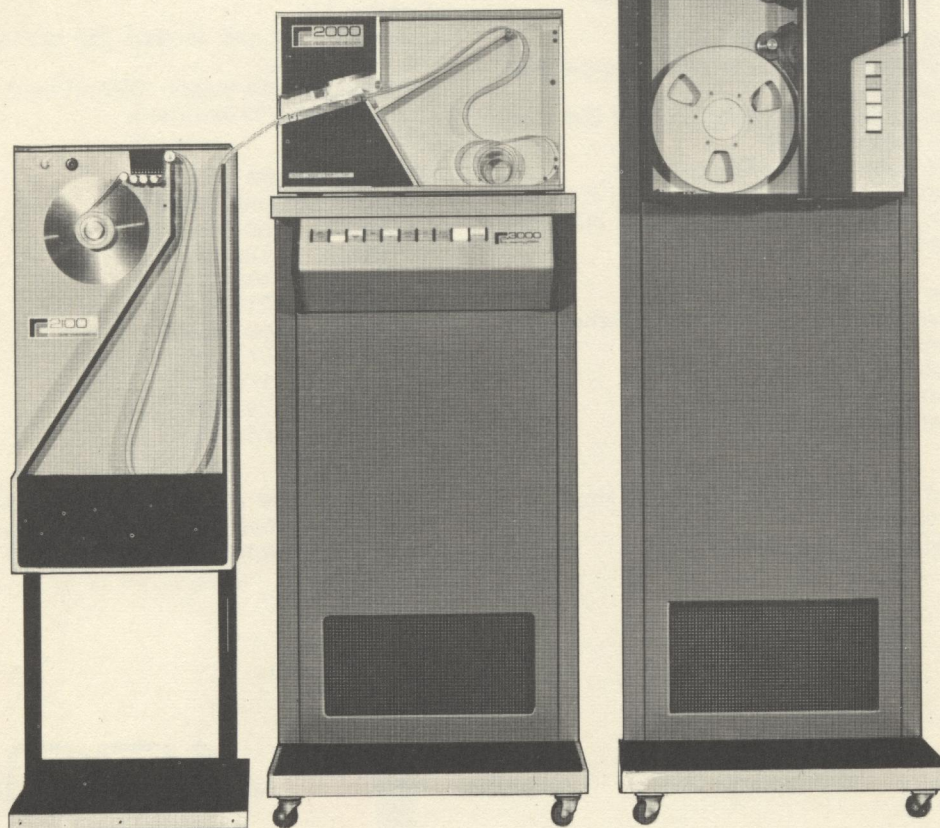
or RC 709). The reader can be equipped with an automatic tape winder, as shown here. The following peripheral devices can be connected to the control unit:

For Off-Line Conversion of Input Data

- paper tape reader (2000 char/sec)
- punched card reader (1200 cards/min)
- optical character reader

For Off-Line Conversion of Output Data

- line printer (1000 lines/min)
- paper tape punch (150 char/sec)
- incremental plotter (e.g. 300 0.1 mm steps/sec)



The system can perform conversion in the following ways: from an optional input device to the magnetic tape station; from the magnetic tape station to an optional output device; from an optional input device to an optional output device, e. g. from a paper tape or punched card reader to a line printer at maximum printing speed or to a paper tape punch for data transmission via teletypewriter.

The converter system can also be used on-line with the RC 1600 graphic converter (separate specification), which can be equipped with an optional data channel for digital input on magnetic tape.

Operation

Prior to the conversion run, the operator in-

puts a so-called catalog on paper tape to the buffer store of the converter. The catalog contains the following information: conversion mode (e. g. from the magnetic tape station to a line printer); block length (maximum 992 characters, all according to the code for input data); code for input and output data; parity for input and output data; special functions (e. g. deletion of characters, end of block with or without stop, shift between two codes).

Technology

Solid-state circuitry is employed throughout the converter system, and mechanical parts are replaced wherever possible by electronic functions for greater reliability and easier maintenance.

CHARACTERISTICS

Control Unit

buffer store: 1024 8-bit characters
cycle time: 7 μ s

Paper Tape Reader (RC 2000)

reading speed: 2000 char/sec
tape formats: 5, 7, and 8 track widths,
6 track width with square holes
buffer store: 256 8-bit characters,
control of alternative input devices

Magnetic Tape Station (RC 707)

tape format: 7-track, $\frac{1}{2}$ inch, international compatibility
recording densities: 800, 556, and 200 bits/inch (two of three)
transfer rate: max. 24,000 char/sec
read/write speed: 30 inches/sec at 800 bits/inch, 36 inches/sec at 556 and 200 bits/inch

Magnetic Tape Station (RC 709)

tape format: 9-track, $\frac{1}{2}$ inch, international compatibility
recording density: 800 bits/inch
transfer rate: 24,000 char/sec
read/write speed: 30 inches/sec

Power

control unit and reader: 220 V, 50 Hz,
388 W, 2 A
magnetic tape station:

220 V \pm 10%, 50 Hz \pm 4%
stand-by current: 3 A
operating current: 6 A

Ambient Air

control unit and reader
temperature: 18 to 25° C
magnetic tape station
temperature: 5 to 40° C
relative humidity: 20 to 70 %

Cooling Air

control unit and reader: 280 m³/hour from ambient
magnetic tape station: 300 m³/hour from ambient, 730 kcal/hour

Size and Weight

control unit and reader
width: 58.9 cm
depth: 62.0 cm
height: 140.9 cm
weight: 121.0 kg
magnetic tape station
width: 57.2 cm
depth: 57.0 cm
height: 179.9 cm
weight: 166.0 kg

The paper tape reader can be supplied with an optional tape winder (RC 2100), which winds tape automatically as fast as it is read.

RC 4000[®]
COMPUTER