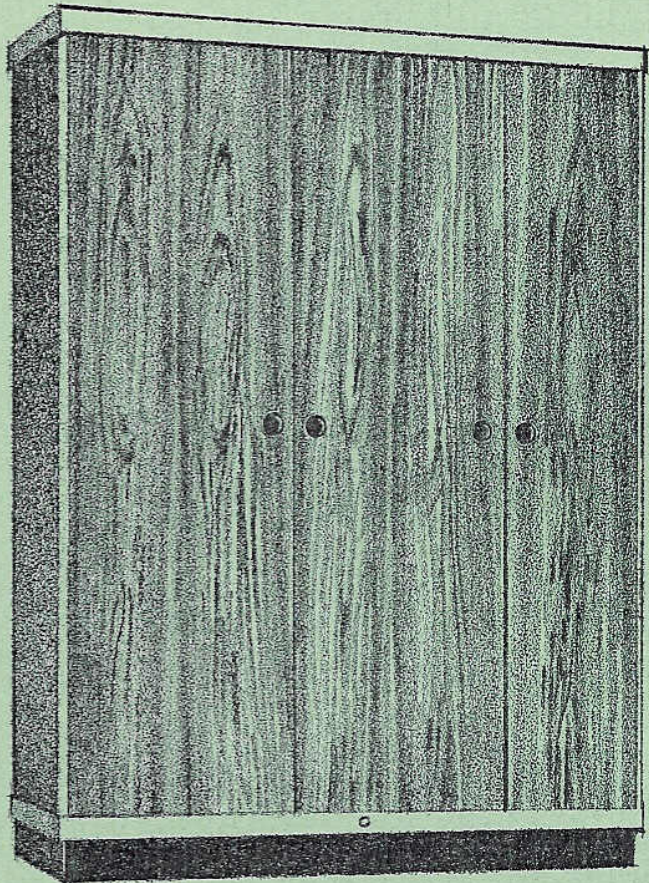


# SPECIFICATION

**GIER**  
ELECTRONICS



**HARDWARE**

## **BUFFER STORE**

The Buffer Store is an optional, high-speed, secondary storage device designed to supplement both immediate and random access storage and to accommodate magnetic tape transfers.

A buffer serves as an intermediary between two storage systems of varying access times and formats to compensate for the difference in rate of data flow. When used with the GIER Computer, the Buffer Store synchronizes the transmission of data between the immediate access store in the Central Processor and Magnetic Tape Stations or other peripheral devices.

The Buffer Store utilizes a core store of 4096 42-bit words and has transfer times of  $7 \mu\text{s}/\text{word}$  for transfers to/from peripheral devices and  $15 \mu\text{s}/\text{word}$  for transfers to/from the immediate access store. Transfers take place 42 bits in parallel at the same time as other computer operations. The cabinet housing the Buffer Store has the same size and appearance as the Central Processor cabinet and includes the power supply.



Besides acting as an auxiliary storage device, the Buffer Store, which is connected to the Central Processor by means of the Data Channel, acts as a control unit for peripheral devices. Up to 4 simultaneously operating Magnetic Tape Stations can be connected by means of the Buffer Store.

Electronic adapters have been developed for the Control Data 9100 Tape Unit, the Facit 64 Carousel, and the Ampex TM-7 Tape Unit. The Magnetic Tape Adapters are mounted in the Buffer Store; there is one Adapter for each magnetic tape device or a maximum of four in the Buffer Store cabinet.

The Computer activates the peripherals via built-in circuits in the Buffer Store, and special interface circuitry for each peripheral connected can be included to suit the particular requirements of the various types of peripheral devices. In addition, this circuitry provides a register for collecting one word to permit word-by-word transfers, where the peripheral itself is only capable of character-by-character transfers.

## CHARACTERISTICS

**Size:** width 144.6 cm, depth 54.2 cm, height 192.7 cm

**Weight:** 367 kg

**Core Store Capacity:** 4096 42-bit words

### Transfer Times

to/from tape stations: 7  $\mu$ s/word

to/from central processor: 15  $\mu$ s/word

**Number of Tape Stations:** 4 (simultaneous operation)

**Power:** 50-60 Hz; 3 x 380, 3 x 220 V

maximum power: 581 kcal/h (675 W)

maximum line current: 1 A at 3 x 380 V

fuses in mains connection: 6 A

### Environment

cooling air: 700 m<sup>3</sup>/h from plenum

air temperature: 18-23° C

relative humidity: 40-70 %

These Characteristics apply to the Buffer Store with 4 Magnetic Tape Adapters.

**A/S REGNECENTRALEN**

FALKONERALLE 1  
COPENHAGEN F. · DENMARK

**A/S SCANIPS**

SORGENFRIGATE 11  
OSLO · NORWAY

**ING. UGO DE LORENZO & C.**

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