

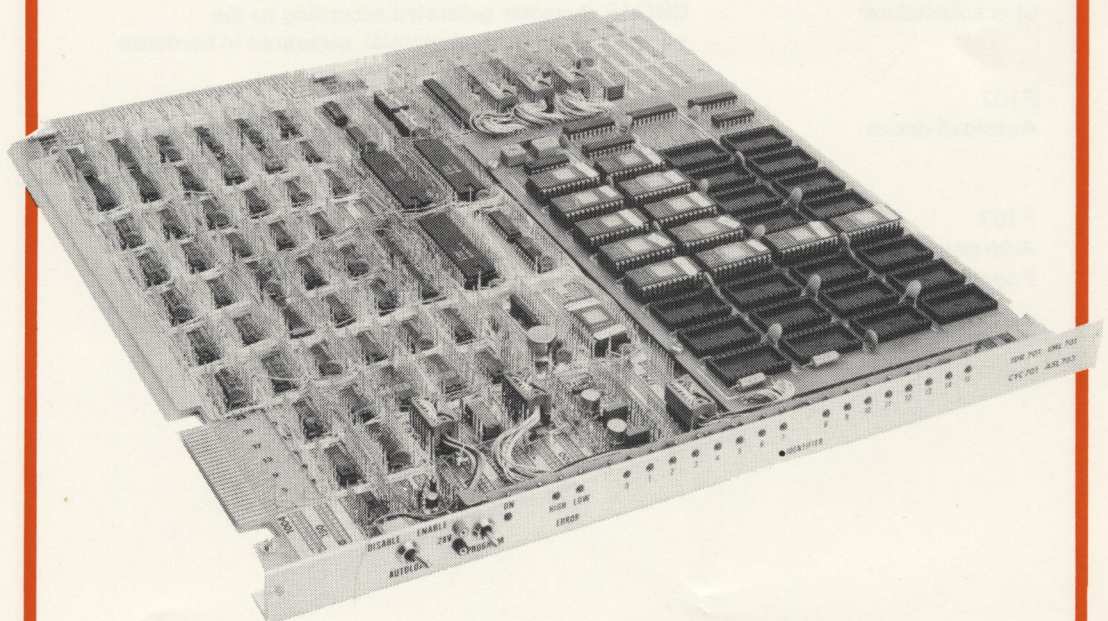


# **F100-F103**

## ***Features for unat- tended operation***

**F100: Identification Register**  
**F101: Cyclic Redundancy Check**  
**F102: Image Load**  
**F103: Automatic System Load**

- **NODE IDENTIFICATION**
- **CRC-16 HARDWARE GENERATED**
- **64 KB EPROM FOR AUTOLOADING**
- **UNATTENDED SYSTEM LOADING**



## GENERAL

The F100/101/102/103 units feature system supervising and achieve increased system utilization. The features are used in RC 3600 Systems.

All units are based on the F100 unit which may be supplied with one, two or all of the other units. This is because the units are logically distinct but physically mounted on the same controller board.

### F100 IDENTIFICATION REGISTER

In network applications a node has to be identified. An RC 3600 used as a node in RC NET can be given an address number to identify the hardware unit using the F100 Identification Register. The number is selected by means of switches and displayed at the front frame of the controller board.

### F101 CYCLIC REDUNDANCY CHECK

The checking procedure is applied in data transmission to make sure that datablocks have been correctly transmitted via the communication lines. The F101 unit generates the CRC-16 character based on the  $x^{16} + x^{15} + x^2 + 1$  polynomial. As the CRC character is generated in hardware, the F101 CRC Unit contributes to improved system performance.

### F102 IMAGE LOAD

In order to enable a quick or even unattended load of software the F102 Image Load is applied. The unit contains the software in an EPROM memory which can be sized in the range 0 - 64 Kbytes depending on the size of the software package that has to be loaded. The specified software is included on delivery. Otherwise the F102 Image Load is used in the same way as other autoloader devices. Typically it is applied in systems with semiconductor memory as well as in systems without attending personnel, e.g. remote device controllers, terminal concentrators and nodes - and it facilitates fast and easy loading.

### F103 AUTOLOADING SYSTEM LOAD

The F103 Automatic System Load is used in unattended RC 3600 Systems to initiate the autoloader procedure whenever a stop or malfunction of the running software should occur. The running software addresses the F103 unit at regular intervals and if such an addressing arrives out of step the autoloader procedure is initiated.

## SPECIFICATIONS

F101	
Identification:	16-bit register, content switch selectable, content displayed
F102	
Checkprocedure:	CRC-16 character generated according to the $x^{16} + x^{15} + x^2 + 1$ polynomial, generated in hardware
F102	
Autoloader device:	EPROM memory, factory programmed with specified software, max. 64 Kbytes
F103	
Addressing time:	0.5 - 15 sec.
Function switch:	enable/disable
Mounting:	F100 - any slot in a controller chassis F101/102/103 - on F100 controller board.