



# Loader Storage Unit

**PRODUCT DESCRIPTION**

The Loader Storage Unit is used primarily as an automatic initialization/restart device for remote or unattended systems.

The controller is designed to give the user the utmost flexibility in initialization program format and watchdog timer sensing. The controller is capable of housing 2,048 bytes of PROM in 128-byte segments. The incorporated watchdog timer may be strapped for a timing interval from 16 milliseconds to 256 milliseconds.

**FEATURES**

- Unattended Program Reload
- Standard Operating System Loaders
- Custom Program Parameters
- Program Loop Detection

**OPERATIONAL CHARACTERISTICS**

The unit is contained on one printed circuit board, has a fixed device assignment, and plugs into the standard Interdata Multiplexor Bus. Unlike most device controllers, the Loader Storage Unit does not generate an interrupt.

The watchdog timer is used to signal the initialization sequence. Under normal operating conditions the timer is reset by a software generated output command prior to the preset time-out delay. Should the program fail or enter an infinite loop, the timer will time-out and the restart sequence may be initiated. The unit may also be used to restart upon restoration of power after a power failure.

Three switches are provided for manual control of the unit. The switches are bracket-mounted and connect to the Loader Storage Unit via a 10-foot cable. The switches are as follows:

DESIGNATION	FUNCTION
ON/OFF	Inhibits addressing the unit.
ENAB	Allows initialization of the system upon watchdog time-out.
INIT	Unconditionally initializes the system if the ON/OFF switch is in the ON position.

Several predefined loader programs are available for both 16- and 32-bit systems. These loaders allow automatic loading of operating systems from disc I/O devices.

## SPECIFICATIONS

### STORAGE CAPACITY

Loader Storage Unit Controller	2,048 Bytes
Storage Module	128 Bytes

### WATCHDOG TIMER

Minimum Interval	16 milliseconds
Maximum Interval	256 milliseconds*
Selectable Increment	16 milliseconds
Accuracy	± 5%
Standard Strapped Interval	96 milliseconds

\*A user may customize the timer over the range 10 milliseconds to 10 seconds by changing two RC networks in the controller.

### POWER

Loader Storage Unit Controller	1.0 Amp @ + 5V
Storage Module	0.1 Amp @ + 5V

### DIMENSIONS

7 X 15 inch (17.8 X 38.1 cm) Printed Circuit Board

### WEIGHT

2 Pounds (.91 Kg)

## INTERDATA PRODUCT NUMBERS

M70-104	Loader Storage Unit Controller with hardware watchdog timer and IC sockets for up to 16 each M70-105 Storage Modules.
M70-105	128 Byte Storage Modules.
M70-106	16-Bit Boot Loader. Loads BOSS, DOS, RTOS, or OS/16 MT 1 from 2.5, 10 or 40 megabyte disc.
M70-107	32-Bit Boot Loader. Loads OS/32 MT from 2.5, 10 or 40 megabyte disc and MSM80 and 300 Storage Modules.
M70-108	16-Bit Boot Loader. Loads OS/16 MT2 from 2.5, 10 or 40 megabyte disc and MSM80 and 300 Storage Modules.
S90-402	Loader Storage Unit Support Program (16 Bit).
S90-403	Loader Storage Unit Support Program (32 Bit).

When ordering customer designed storage modules, customers must supply a binary paper tape or a listing specifying the data to be written into the LSU PROMs. This is prepared in accordance with program S90-402 or S90-403. The LSU is not used with the 5/16 or 6/16 processors.

The information contained herein is intended to be a general description and is subject to change with product enhancement.