

8 CHANNEL HIGH SHOCK EVENT RECORDER

DESCRIPTION

The Model 10 is a miniaturized, high shock, solid-state recorder designed to acquire timing information in shock environments of up to 50,000 G's. The epoxy-encapsulated unit has parallel digital inputs for eight channels which can be used to measure time of events in automotive crash testing, blast testing, weapon testing, or testing in hostile field environments. Low power consumption allows instrumentation build-up weeks before the test and extends the time for data retrieval after the test. Data retrieval is accomplished using a personal computer. Software supplied with the recorder enables retrieval, storage, display, and printing of the data.

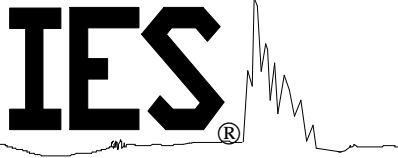
FEATURES

- Small Size
- Low Power with 3.3 or 5.0 Volt Logic
- Single Battery Operation
- Eight Digital Input Channels
- High Sample Rate
- Easy Data Retrieval
- Extensive Software Support
- Reusable



Recorder Type	Model 10 (3.3 Volt)	Model 10 (5 Volt)
Channel Input Voltage (Logical 0)	0 to 0.7 Volts	0 to 1.5 Volts
Channel Input Voltage (Logical 1)	2.6 to 3.3 Volts	3.5 to 5.0 Volts
Trigger (Positive Edge)	3.3 Volt Pulse	5.0 Volt Pulse
Supply Voltage	6 to 15 Volts	8 to 15 Volts
Standby Current	6 Microamps ¹	10 Microamps ¹
Data Acquisition Current	2 Milliamps ¹	10 Milliamps ¹
Data Retention Current	6 Microamps ¹	10 Microamps ¹

¹Typical Currents



MODEL 10

ELECTRICAL SPECIFICATIONS

Number of Channels.....	8
Channel Input Impedance.....	CMOS logic
Storage Capacity.....	32K Bytes (32K x 8)
Sample Rate.....	Selectable to 2.0 MHz ²

²Selectable at Factory ONLY

PHYSICAL SPECIFICATIONS

Temperature Range.....	0° C to 75° C
Maximum Shock Level.....	50,000 G's
Size and Shape.....	See Figure

Note: The Recorder is fully epoxy-encapsulated with exception of the input terminals and the output PC Board connector.

FACTORY SELECTABLE OPTIONS

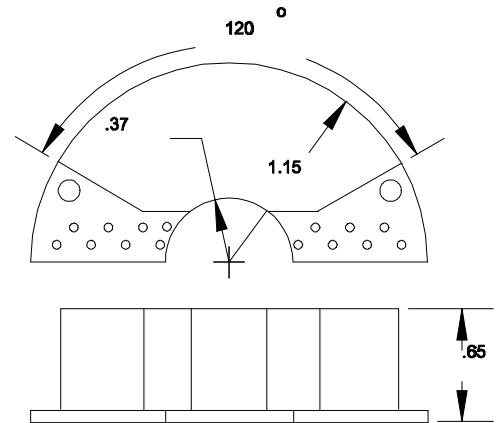
- Single or Dual Sample Rates
- 3.3 or 5.0 Volt Logic
- User Defined Package Shape
- Resistors on Inputs (Pull-Up, Pull-Down, or None)

STANDARD CONFIGURATION

- 3.3 Volt Logic
- 220 KΩ Pull-Down Resistors
- 100 KHz Oscillator

DATA RETRIEVAL

Software is supplied to retrieve, store, display, examine, and print data. The software requires a 386 based PC computer configured with a mouse, VGA graphics, a hard disk, a high density floppy, and a minimum of 2 Meg expanded memory. A PostScript laser printer is highly recommended for data printout. A DI-10 Interface Box (shown below) is required to retrieve the data and must be purchased separately.



DI-10 Interface Box

PostScript is a registered trademark of Adobe Systems Inc.
Specifications and options subject to change without notice.

INSTRUMENTATION and ENGINEERING SERVICES, Inc.

7552 Navarre Parkway Suite 42, Navarre FL 32566

Tel: 1-850-515-1244, Fax: 1-850-515-1245

www.iesrecorders.com

e-mail: ies@iesrecorders.com