

V-325 ANALOG HIGH-BANDWIDTH AIRBORNE CASSETTE RECORDER/ REPRODUCER

The V-325 High Bandwidth Analog Cassette Recorder/Reproducer has been specifically designed to provide maximum waveform recording flexibility in severe environment and harsh airborne applications. Its high bandwidth performance satisfies recording requirements of up to 12MHz. With its unique signal interface design, the V-325 can accept, record and play back virtually any input waveform, from DC up to its specified maximum bandwidth. This feature makes the V-325 particularly well suited for direct recording of a variety of analog data devices and imaging sensors without the need for special input/output signal formatting.

#### RECORDER TYPE

2-Head Rotary Helical Scan, Cassette

## **MEDIA**

ST-120 850 Oe 1/2" Magnetic Tape Cassette

## RECORD/PLAYBACK TIME

40 Minutes with ST-120 Cassette

## PHYSICAL CHARACTERISTICS

Size:8.35"Wide x5.08"High x13.33"Deep(Less Tray)
Weight:Less than 20lbs(Less Cassette and Tray)

# **POWER REQUIREMENTS**

Source:28VDC per MIL-STD-704D Consumption:Under 50Watts,Less Heaters

## FEATURES

- ♦ High Analog Bandwidth: 12MHz
- ♦ Signal to Noise Ratio: 40dB
- Automatic Gain and Offset Control
- ♦ Time Base Collection
- ◆ Digital Automatic Tracking Control
- ♦ One Audio, Two Auxiliary Channels
- ♦ Designed for MIL-E-5400 Environment
- ◆ Designed for Compliance with MIL-STD-461/462 and 704D
- ◆ Performance Monitoring via Built-In-Test: Initiated,Continuous
- ◆ Command/Status: RS-422 or Discrete Parellel
- ◆ Event Marking, Detection, Search

# **SPECIFICATIONS**

#### HIGH BANDWIDTH CHANNEL

1Ch. DC to 12MHz Bandwidth

SNR≥40dB

Automatic Gain/Offset Control

Helical-scan FM Recording

with Time-Base Correction

I/O: 0~1V,75Ω DC Balanced

#### **AUDIO CHANNEL**

1Ch. 200Hz to 20KHz Bandwidth

SNR≥38dB

AC Bias Longitudinal

Overplay Capability

I/O: 1.1Vp-p 10K $\Omega$ /100 $\Omega$  AC,AGC

#### **AUXILIARY CHANNELS**

Analog: 2Ch.

80Hz to 60KHz Bandwidth

SNR≥50dB

Deep-Layer Helical-scan,FM

I/O: 1.1Vp-p 10KΩ/600Ω AC,AGC

#### COMMAND/STATUS INTERFACE

RS-422-A, Discrete Parallel

## **POWER**

 $\leq$ 50W 28VDC per MIL-STD-704D,Less Heater

≤150W 28VDC per MIL-STD-704D, with Heater

#### **BUILT-IN-TEST**

Initiated and Continuous

#### SIZE

8.35"Wide x5.08"High x13.33"Deep,Less Tray

#### WEIGHT

Less than 20lbs(9.1Kg),Less Cassette and Tray

#### **ENVIRONMENTAL PERFORMANCE\***

#### Vibration

Functional: 5.3grms Endurance: 15grms

#### Acceleration

Operational: 9.0g,-z axis:4g

Structural: 13.5g

#### Shock

Operational: 20g,11msec Crash Safety: 40g,20msec

## Temperature

Operating: -40 to +55°C

Storage: -55 to +85°C

## Temperature Shock

Non-Operating: -57 to +71°C

#### Altitude

Operating: 0-50,000feet

## Explosive Atmosphere

Method 511.2, Procedure 1

## Humidity

95%,10days

## Salt Fog

48Hours

#### **EMI**

Per MIL-STD-461C,-462

\*Unless otherwise noted, designed in accordance with testing per MIL-STD-810D.