



- ⊕ Designed and Manufactured in the United States
- ⊕ S-VHS and VHS Formats Available
- ⊕ Electrically Heated for Low Temperature Operation
- ⊕ Flexible Software for Different mission Configurations
- ⊕ State of The Art Technology, Direct Drive Scanner and Capstan Mechanisms
- ⊕ No Belts or Heavy Flywheels in the Scanner or Capstan System
- ⊕ Front Loading Compact Design-Featuring Non-Powered Cassette Insertion and Removal
- ⊕ Redundant Cassette Load Assembly
- ⊕ Improved Bandwidth in S-VHS Mode of Operation
- ⊕ Redundant Cassette Door Locks
- ⊕ Able to Record Multisync Rates from 525 to 1249 Lines
- ⊕ Environmentally Tested to Withstand Salt Fog Spray and High Altitudes
- ⊕ Rugged to withstand Extreme Shock and Vibration
- ⊕ Manufacturing Facility Fully U.S Military Standards Certified
- ⊕ Fully EMI Compliant with U.S. Military Standards 461 CE03, CE04, CS01, CS02, CS06, RE02, RS02 and RS03
- ⊕ MIL-STD 704 Rated Power Input Module



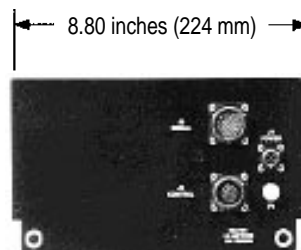
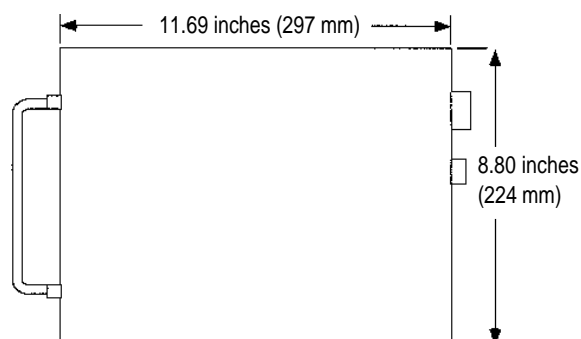
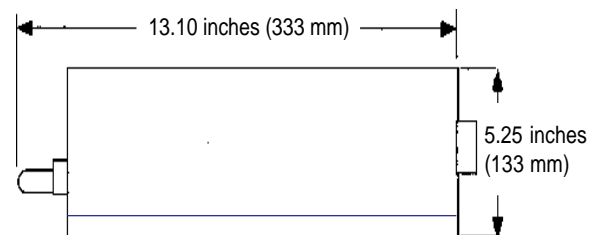
# NR-20S Specifications

<b>Input Power*</b>	28VDC +4, -8
<b>Heater Power*</b>	115VAC +6, -7; 400Hz ±20
<b>Power Requirements*</b>	US Mil Std 704
<b>Normal*</b>	28VDC +4, -6, 15W 115VAC +6, -7, 100W
<b>Connectors*</b>	Mil-C-38999 (II)
<b>Tape Width</b>	12.65mm
<b>Record Time</b>	>2Hrs with ST-120 tape >3Hrs with ST-180 tape
<b>Tape Speed</b>	33.35mm/sec.
<b>Video Input level*</b>	1.0 V p-p
<b>Video Input Impedance*</b>	75Ω
<b>Horizontal Resolution</b>	
S-VHS Mode	>400 lines@525 lines per field
VHS Mode	>240 lines@525 lines per field
<b>Video Frame Rate</b>	60Hz EIA
<b>Video Field Rate</b>	525 to 1249 lines per frame
<b>Signal to Noise Ratio</b>	
VHS Mode	>42 dB
S-VHS Mode	>45 dB
<b>Audio Channels</b>	2
Freq. Response	40-12,000 Hz
Input	-6 dBs, 50KΩ
Output	-6 dBs, 1KΩ

## Environmental Specifications

<b>Operating Temperature</b>	-40°C to +55°C
<b>Storage Temperature</b>	-55°C to +85°C
<b>Operating Humidity</b>	10% to 85% (non-condensing)
<b>Sand &amp; Dust</b>	Mil-Std-810 Method 510.1
<b>Salt Fog</b>	Mil-Std-810 Method 509.1
<b>Vibration</b>	Mil-Std-810, Method 514.2 3.5 G's RMS, Random, 20-2000Hz
<b>Shock</b>	Mil-Std-810 Method 516.2
<b>EMI</b>	Mil-Std-461
<b>Weight</b>	14.75lbs. (6.7 kgs.)
<b>Altitude</b>	>40,000 ft.

\* These parameters can be changed to meet mission requirements



**Note:** For S-VHS (NTSC) Format, specify Model NR-20S.  
For VHS (NTSC) Format, specify Model NR-20.  
For PAL/CCIR see SE-065P.

SE-065S, 5/99



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