RADA’s sophisticated and affordable DVDR is a leading digital system for debriefing and flight performance improvement, which is installed in thousands of aircrafts around the globe and is supplied by leading integrators. The system can be used simultaneously for all the planes participating in each mission, and it is qualified to the harshest military environment.

The airborne component is compact, formed, and fit to all common airborne recorders. It has flexibility in interfacing with video formats, protocols and other avionics data. It can also be used to transfer data to the avionic system.

The DVDR can be installed in a cockpit, or – in conjunction with an adapting tray – in an equipment bay. Video recording rates are configurable per channel, and can vary from 2 to 32 Megabits/sec. The combination of recording rates settings and Removable Mass-Memory Unit (RMU) capacity provides compliance with any practical mission recording time requirement. The RMU also implements numerous standards of secure erase functionality.
The DVDR effectiveness can be extended by RADA’s Ground Debriefing Systems (GDS), which provides the ground segment with debriefing capabilities that can be applied to mission support and air-combat exercises.

The GDS can simultaneously playback data, audio, and video from multiple sources in a synchronized manner. The system further supports special features such as simulation and analysis tools, which are applicable for mission debriefing and for data management of military units.

RADA’s family of Ground Debriefing Solutions (GDS) are designed for advanced squadron level post-flight and in-air debriefing. The GDS display synchronized playback of the video, audio, and Air Combat Maneuvering Instrumentation (ACMI) data recorded on the Removable Memory Unit (RMU) of all the aircrafts that participated in the exercise. The GDS also provide archiving and sharing capabilities, including a pre-alert recording option.

### Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power</td>
<td>28 VDC, MIL-STD-704G, 45W max</td>
</tr>
<tr>
<td>Dimensions</td>
<td>148mm W x 165mm L x 120mm H (without tray)</td>
</tr>
<tr>
<td>Weight</td>
<td>Up to 4.5 kg including RMU</td>
</tr>
<tr>
<td>Temperature</td>
<td>-54° C to +71° C</td>
</tr>
<tr>
<td>Cooling</td>
<td>Passive</td>
</tr>
<tr>
<td>Vibration</td>
<td>10.6 Grms</td>
</tr>
<tr>
<td>MTBF</td>
<td>7000h (including RMU)</td>
</tr>
</tbody>
</table>

### Typical Installations

![Typical Installations Image]
## Interfaces

- 6 x video inputs HD-SDI / (NTSC, PAL, Composite, Y/C, RGB)
- 2 x video outputs (Digital / HD-SDI)
- 2 x Audio inputs
- 2 x Audio outputs
- Up to 4 x MIL-STD-1553B MUX BUS channel
- 2 x 10/100/1000 Fast Ethernet interface channel
- 4 x RS422A full-duplex asynchronous communication channels
- Input Discretes for unit control and events recording
- Output Discretes for feedback and status indications

## Main Advantages (DVDR)

- Handles all digital and analog video format up to HD
- Resolution MPEG-2 or MPEG-4 (H.264) video compression
- Incorporates audio recording on each video stream
- Real time playback
- Data server functions, centralized source of mass-memory
- Fast ethernet interface channels
- Includes DTS/DTE functionalities
- Large RMU capacity - up to 1TBytes of flash memory
- Advanced autonomous secure-erase features
- Automatically taps information from the aircraft avionics bus

## Main Advantages (GDS)

- High level of synchronization, timing, and details
- Affordable and sophisticated debriefing solutions including laptop-based, desktop-based, and network-based system
- Supports all missions flown and fielded throughout the entire fleet
- Offers advanced data management capabilities with failure-resistant architectures