

OPTIONAL DATA PLAYBACK UP TO 100Gbps



FEATURE SUMMARY

- ✓ A rugged (**MIL-STD-810** compliant) Ethernet recorder featuring **4 x 25GbE** ports.
- ✓ Sustained 100% Ethernet capture and record performance at **100Gbps**.
- ✓ Up to **180 Terabytes (SSDs)** of local data storage.
- ✓ Data offload: **USB 3.0** and **10GbE** or optional **25/40/100GbE** ports.
- ✓ **STIG** compliant & **AES256** encryption options.
- ✓ Real-time status monitoring of capture ports.

MOST SUITABLE FOR THE FOLLOWING APPLICATIONS

Wireless comms



- ✓ remote radio
- ✓ 5G baseband
- ✓ μ/mmWave
- ✓ MIMO
- ✓ O-RAN

Autonomous vehicle



- ✓ LiDAR
- ✓ IoT (i.e., MIPI® DSI)
- ✓ test & measurement

Embedded systems



- ✓ RFSoc
- ✓ GPGPU
- ✓ FPGA

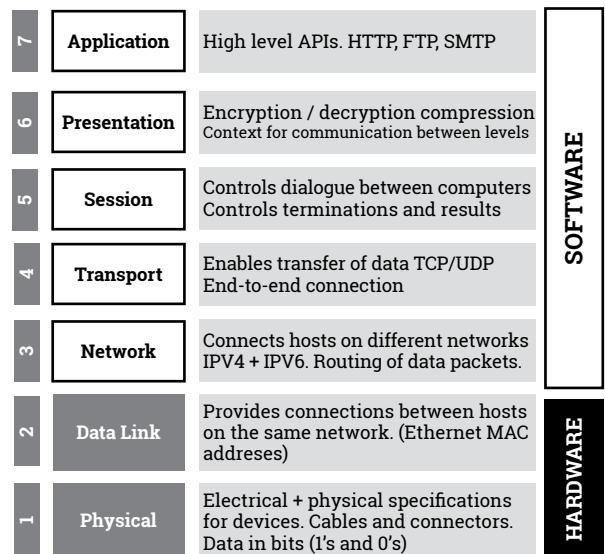
DESIGNED FOR ANY NETWORK PROTOCOL

- ✓ The **RDR7000-R-25G-4** captures data from **Layer-2** through **Layer-7** of the Ethernet protocol stack.
- ✓ This includes recording **IPV4** or **IPV6** protocols at the network layer and **TCP** or **UDP** protocols at the transport layer.
- ✓ The result is our robust, **network protocol-agnostic** packet recording tool.
- ✓ Data format - compatible with other popular network monitoring tools like **Wireshark**.

Daqscribe
high-speed
Ethernet
recorder

x GbE

100% capture & record
from Layer 2



| | |
|--|---|
| Performance | <ul style="list-style-type: none"> ✓ Line rate Rx 100Gbps (4 x 25Gbps) for packet size 61 - 10,000 bytes ✓ Line rate Tx 100Gbps (4 x 25Gbps) for packet size 61 - 10,000 bytes ✓ 100% packet capture |
| Network Interfaces | <ul style="list-style-type: none"> ✓ IEEE 802.3 25GbE Ethernet support ✓ Network interface: 1 x QSFP28 port or 4 x SFP28 ✓ QSFP28 modules: 4 x SFP28 CR/SR breakout from QSFP28 ✓ SFP28 modules: 25GBASE-CR/SR/LR/LR-BiDi, dual-rate 10/25GBASE-SR/LR |
| Hardware Time Stamp | <ul style="list-style-type: none"> ✓ Resolution: 1 ns, Stratum 3 compliant TCXO ✓ Time formats: PCAP-ns/-µs, UNIX 10 ns, 1 ns |
| Timing/Synchronization | <ul style="list-style-type: none"> ✓ SMA interface for PPS ✓ RJ45 100/1000BASE-T interface for IEEE1588 PTP support ✓ OS time synchronization |
| Data Format | <ul style="list-style-type: none"> ✓ PCAP format (capture/record only) ✓ NTCAP – PCAP style binary format (capture/replay) ✓ CLI utilities: simple/quick conversion from NTCAP to standard PCAP format or payload extraction |
| Optional Capture /Record In-Line Features (FPGA Processing) | <ul style="list-style-type: none"> ✓ Filtering based on e.g. L3/L4 criteria ✓ GTP, IP-in-IP, GRE and NVGRE tunneling support ✓ IP fragment handling ✓ Slicing at fixed or dynamic offset |
| Storage Options | <ul style="list-style-type: none"> ✓ NVMe NAND flash (enterprise) ✓ 25TB (149TBW), 50TB (298TBW), 120TB (269TBW), 180TB (403TBW) ✓ Storage in TB with endurance TBW (Total Bytes written in PB) ✓ SSD endurance TBW is based on 128K sequential writing |
| CPU & Memory | <ul style="list-style-type: none"> ✓ Intel Xeon scalable dual socket CPUs ✓ System memory from 64GB up to 2TB |
| Peripherals | <ul style="list-style-type: none"> ✓ 2 x rear 10GBASE-T, 1 x 1GbE IPMI ✓ 2 x rear USB3.0 ✓ 1 x rear COM port ✓ Rear VGA/DVI/HDMI display |
| Data Offload Options | <ul style="list-style-type: none"> ✓ 10G: 2 or 4 x SFP+, 10GBASE-T 40G: 1 or 2 x QSFP+ 100G: 1 or 2 x QSFP28 |
| Environmental Standards | <ul style="list-style-type: none"> ✓ MIL-STD-810, Operational Temperature, Method 501, Procedure I/II: -15°C to +55°C, capable of -40°C to 71°C with select processors ✓ MIL-STD-810, Storage, Method 501, Procedure I/II: -55°C to +85°C ✓ MIL-STD-810, Humidity, Method 507, Procedure II: 240 hours with humidity kit ✓ MIL-STD-810, Altitude, Method 500: 12,500ft operation, 40,000ft transport ✓ MIL-STD-810, Vibration, Method 514, Procedure I: 4.63 GRMS, 5-2,000Hz, 60 min/axis with solid state drives + vibration kits ✓ MIL-S-901, Grade B ✓ MIL-S-901, Grade A: With solid state drives + shock kits |
| Electromagnetic Compatibility Standards | <p>Some standards may require an internal kit</p> <ul style="list-style-type: none"> ✓ AC, FCC compliant ✓ AC, MIL-STD-461, RE102, CE102 compliant ✓ DC, MIL-STD-461, RE102, CE102 compliant ✓ RTCA DO-160 Section 21, Category M |
| System Cooling | <ul style="list-style-type: none"> ✓ Five high speed, high volume fans CPU temperature controlled |
| Power Supply | <ul style="list-style-type: none"> ✓ Option 1: 1200W 120/240VAC 1+1 w/PFC ✓ Option 2: 1005W 18-36VDC |
| Dimensions & Weight | <ul style="list-style-type: none"> ✓ Height: 5.25" (13.34cm) x Width: 17.5" (44.45cm) EIA-310 rack compliant x Depth: 24" (61cm) ✓ Weight: 60-66 lbs. (27-30 kg) [content dependent] |
| Mounting | <ul style="list-style-type: none"> ✓ Option 1: Mounted on Delrin glides ✓ Option 2: Fixed mount, front and rear ✓ Option 3: Jonathan rails |