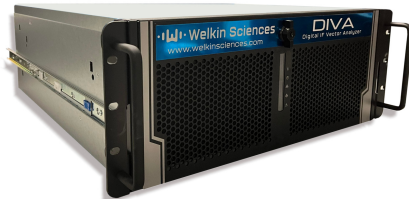


DIFI Digital IF Vector Analyzer (DIVA-D)

Meet your test, validation, and troubleshooting needs

The DIFI Digital IF Vector Analyzer (DIVA-D) includes a 100 GbE network interface supporting the DIFI v1.1 standard. The DIVA-D unit's test and analysis capabilities form a potent solution for your test, validation, and troubleshooting needs, enabling you to analyze the flow of DIFI packets in a network while examining the signals transported by those packets. This unique capability is an effective asset for packet inspection on both the testbench as well as in deployed DIFI transport networks.



WS-SYS-DIFI-DIVA

Features & Benefits

Interface	<ul style="list-style-type: none"> • DIFI v1.1 signal transport, Dual port 100/50/25/10 GbE, QSFP-28 with support for other transceivers via an adapter. • DPDK 21 for kernel network interface bypass. Operation in promiscuous mode to monitor non-destination traffic. • ARP and ICMP are supported.
Monitor	<ul style="list-style-type: none"> • Overview of all streams on interface with drilldown on selected stream. • Observe traffic statistics with detection of dropped packets. Report on malformed packets. • Display information in stream context packets. Signal capture to files is also supported.
Analyze	<ul style="list-style-type: none"> • Payload extraction for all DIFI bit-widths and packet sizes. • Display power spectrum and channel power. • Supports display of I/Q histogram to monitor signal dynamic range and risk of sample overflow.

Soon to be available to U.S. Government customers
on GSA contract 47QTCA19D0035

Test Stimulus

- Low-jitter Signal Data DIFI Information Stream Producer (Signal Data and Context).
- Signals supported include M-PSK, M-APSK, Multitone with Low PAPR.
- Adjustable Signal Payload Size from 72 to 8944 bytes. Bit-width adjustable from 4 to 16 bits.
- Maximum signal sample rate of 300 Msps.

Optional Compliance Package

- DIFI compliance certification (upon approval from the DIFI Consortium). Available 4th Qtr 2023.

Optional Advanced Measurement Package

- Demodulate standard linear modulations, constellation diagram, and error-vector magnitude.
- Es/No measurement.
- Support for blind demodulation, adaptive or fixed-tap equalization.
- Available 3rd Qtr 2023.



Monitoring DIFI Network Traffic with DIVA-D

ID	PAPR (dB)	Type	Source	Destination
100	3.00	QPSK	172.16.0.10000	172.16.0.114000
101	3.75	QPSK	172.16.0.10000	172.16.0.114000
102	5.12	QPSK	172.16.0.10000	172.16.0.114000
103	6.00	QPSK	172.16.0.10000	172.16.0.114000
104	6.25	QPSK	172.16.0.10000	172.16.0.114000
105	6.44	QPSK	172.16.0.10000	172.16.0.114000
106	6.62	QPSK	172.16.0.10000	172.16.0.114000
107	6.78	QPSK	172.16.0.10000	172.16.0.114000
108	6.92	QPSK	172.16.0.10000	172.16.0.114000
109	7.14	QPSK	172.16.0.10000	172.16.0.114000
110	7.50	QPSK	172.16.0.10000	172.16.0.114000
111	8.00	QPSK	172.16.0.10000	172.16.0.114000

Additional interface elements include: Stream ID: 100, Source: 172.16.0.10000, Destination: 172.16.0.114000, Rate: 3000, Payload Size: 256, Bit Depth: 16, Stream Type: QPSK, Packet Depth: 25, PAPR: 3.00, Total Power: 0dBm.

Transmitting Multiple DIFI Signal Data Streams with DIVA-D