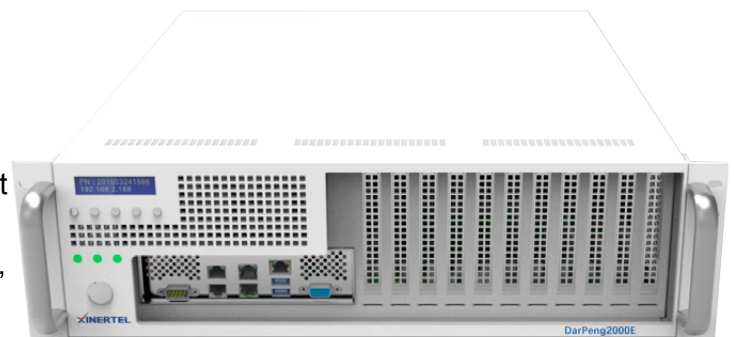


## DARPENG 2000E

# APPLICATION AND SECURITY TESTING

The DarPeng series, Xinertel's high-performance network application security tester, is specially designed to better address the security requirement for triple playback of voice, video, and data applications on a network. It fortifies the prevention, detection and responds to network security threats to the next highest level.



DarPeng tester can accurately simulate multiple of hundreds to millions of the real end-users on the network at any one time, and to assess its network behaviour. It features robust capabilities to test for stress, load and performance of any security devices, either individually as a single layer of application such as Firewall/PS/DS/WAF/DP, or for the entire set of devices residing on the network.

Primarily, it performs system verification, detects any abnormalities and enforces the defence capabilities of network security devices, and prevents the devices and the system from actual viruses, worms, spyware and other malicious cyber threats or attacks. DarPeng can be configured to simulate a large traffic volume of a real attack, as well as, the traffics of the malicious viruses. In addition, it replays the traffic of the actual environment. verifies the system controls and recognizes the tested devices on Windows PC, Mac, Android and iOS at the same time. Ultimately, it cleans up the viruses on the devices and stops similar future threats from infecting the system. More importantly, it is accurate, reliable and easy-to-use.

The architecture of DarPeng 2000E series is based on the new generation x86 that features high performance, high bandwidth, high integration, and high efficiency framework. It is augmented by Xinertel's new generation testing software namely the Application Layer Protocol Simulator (aka ALPS) riding on industry-standard IE Brower/Server (B/S) and PCT foundations.

Furthermore, it performs the traffic simulation with the application layer protocols such as HTTP/FTP/TCP/DNS, voices of VOIP SIP&RTP and videos of RSTP/RTP/IPTV, etc., as well as, the CPS (Connections Per Second) of HTTP/TCP to hit the millions, and CC (CC) to extend into the billions.

Similarly, it can simulate traffics of real threats such as DDOS/botnet attacks/custom attacks, etc., malicious traffic, virus traffic, and fuzzing testing. It supports industry best practices on security algorithms and protocols for encryption and decryption including IPSec and SSL, along with audio and video quality testing.

## Key Features

### ▶ Comprehensive range of interfaces

The tester is compatible up to 4 x100GE OSFP28 interfaces (with rates of 50G, 40G, 25G, 10G), 16xSFP+10GE interfaces, and 32xSFP 1GE interfaces. It allows a mixture of test cards running at different speed to be used simultaneously.

### ▶ Ultra-high application protocol simulation

The tester supports up to 6 million TCP CPS, 180 million TCP CC, 4 million HTTP CPS, 140 million HTTP CC, and 150G HTTP throughputs. This result was obtained from a single unit DarPeng 2000E with 2x100G ports running on self-looping mode. It can also support large-scale application security testing using the cascading approach.

### ▶ Performance and capacity testing of network security devices

The tester supports rigorous performance and capacity testing of network security devices including the Firewalls, Application Firewalls, Load Balancers, WAF, URL Filters, Antiirus, Antispyware, HTTP/HTTPS Accelerators, WAN Accelerators, IDS/IPS, and IPsec VPN gateways, etc.

### ▶ Performance testing of various application servers

The tester supports robust performance testing of servers including the Web server, Mail server, DHCP service, FTP server, DNS server, RTSP/RTP, QuickTime streaming server, and Multicast server etc.

### ▶ Network security testing

The tester supports simulation of traffics from multiple attacks, virus traffic, and network range.

## Product Information

Item	Description	Category
DarPeng2000E chassis	DarPeng2000E host chassis, supporting insertion of 8 interface modules	DarPeng series chassis
K2-100G-1QSFP28-HQ	Port 1 100G/50G/40G/25G/10G five-speed high-performance testing module	DarPeng series testing module
K2-10G-4F-HD	Port 4 SFP+ 10G/1G two-speed high-performance testing module	DarPeng series testing module
K2-1G-4F-HS	Port 4 SFP 1G high-performance testing module, compatible with 1000M photoelectric conversion module	DarPeng series testing module
K2-1G-4C-HT	Port 4 RJ45 1G high-performance testing module, 10M/100M/1000M rates are acceptable.	DarPeng series testing module

## Supported Protocols

Application Layer	TCP, UDP, SCTP, RAW, HTTP, DNS, HTTPS, HTTP2, FTP, SMTP, BitTorrent, eDonkey, SSH, Telnet, TFTP, POP3, IMAP, SKYPE, RTMP, MySQL, QQ, Tiktok, WeChat, Toutiao, H.225, H.245, MSSQL, SMB, RPC, Oracle
Industrial Network Protocol	IEC104, MODBUS(TCP/UDP), OPC UA, OPC DA, ENIP, MQTT, Profinet
Voice	SIP/RTP, Voice Codec (PCMU, PCMA, G.723, G.728, G.729, G.726-32, G.729AB, G.729A, G.723.1), MOS score
Video	RTSP/RTP, Multicast, Video Codec (H.261, H.262/MPEG-2, H.263, H.264, H.265, MPEGTS)
DDOS	L2/L4 DDoS Attacks (ARP/ICMP/UDP/TCP/IP/IGMP) and L4/L7 Application Attacks (DNS Reflect, Slowloris) etc.
Virus and Attack Bases	Up to tens of thousands of security vulnerability attacks (such as common CVE vulnerabilities, SQL injection, etc.)
Access Protocol	IPv4, IPv6, 802.1Q(QinQ), DHCP v4/v6 client and server, PPPoE v4/v6 client and server, IPsec v4/v6, GTP, 802.1x(MD5/TLS/TLS1.1/TLS1.2/TTLS), SSL VPN (IP/TCP+UDP/TCP/UDP)

## List of Specifications

Network Interface	<ul style="list-style-type: none"> <li>• 4 QSFP28 100G interfaces at most (compatible with interfaces of 50G, 40G, 25G and 10G)</li> <li>• 16 SFP+ 10G/1G interfaces at most</li> <li>• 32 SFP/RJ45 1G interfaces at most</li> </ul>
Dimension	3U rack mounted: 132mm×438mm×500mm (Height × Width × Depth) (excluding hangers)
Installation Requirements	It can be installed in a universal cabinet that meets the IEC 297 standard: <ul style="list-style-type: none"> <li>• Width: 19 inches</li> <li>• Depth: 800mm and above</li> </ul>
Weight	26KG
Work Environment	<ul style="list-style-type: none"> <li>• Work temperature: 0°C to 40°C</li> </ul>
Power Supply	AC 110~230V; 50Hz; 10A
Power Consumption of the Whole Machine	1500W



Sales : 8610-82349338

Email: [marketing@xinertel.com](mailto:marketing@xinertel.com)

Supports: 400-081-9262

Website: [www.xinertel.com](http://www.xinertel.com)

Add: 2nd Floor, No. 6 Chuangye Road, Shangdi Information Industry Base, Haidian District, Beijing, People's Republic of China.

