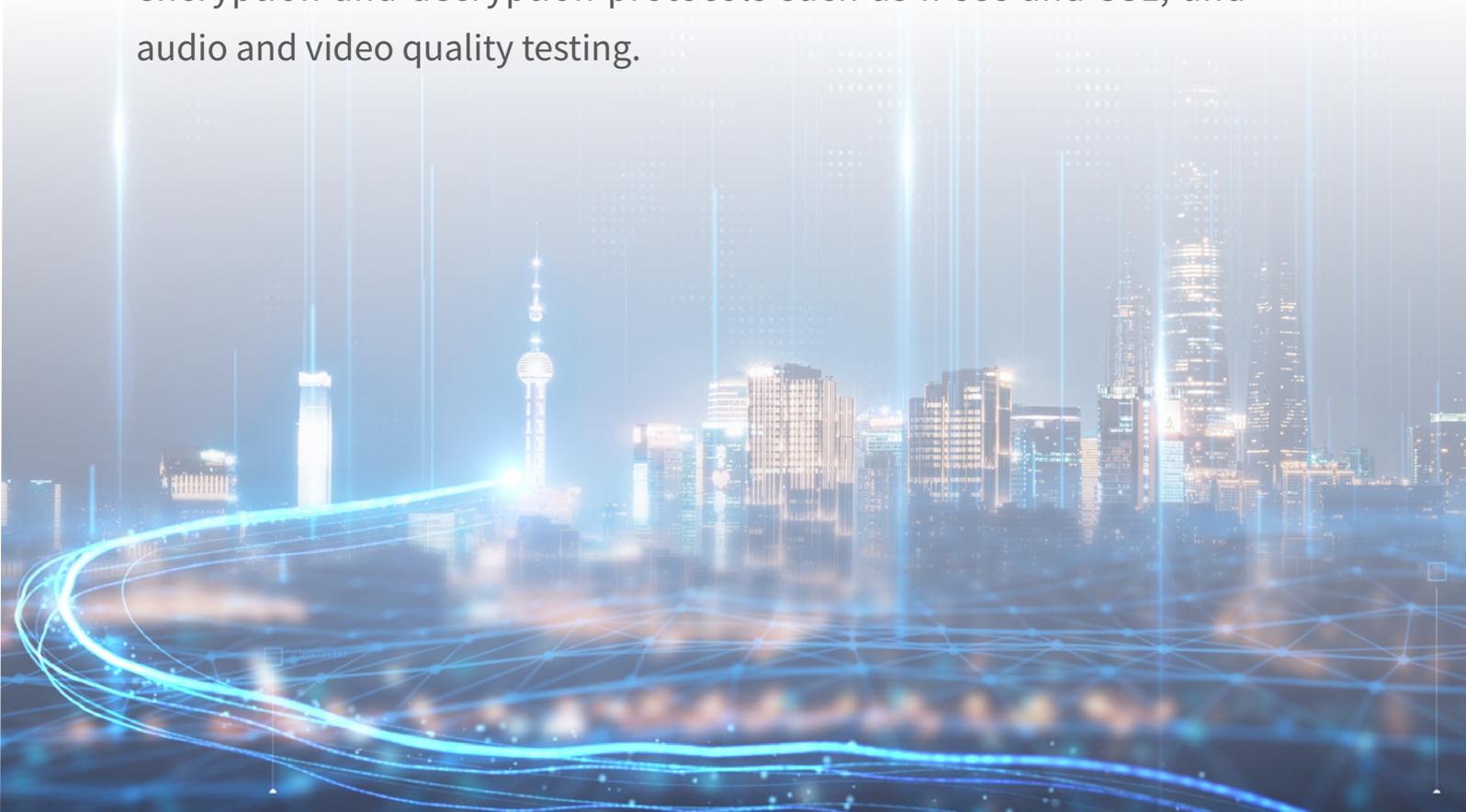## DarPeng series network application security tester

DarPeng series is a high-performance tester launched by Xinertel for voice, video, data and network security which can accurately simulate the network access behavior of millions of real end users, and test the function and performance of network security devices (such as Firewall/IPS/IDS/WAF/DPI, etc.) or the entire system; Verify the ability of network security devices or systems to detect, defend against attacks and viruses by simulating a large number of real attack traffic and malware and virus traffic.

Product Introduction

DarPeng2000E is a network application and security tester based on the new generation x86 architecture characteriswith high performance, high bandwidth, high integration and high efficiency.

Cooperate with Xinertel's new generation of B/S test software ALPS based on PCT architecture, DarPeng2000E supports real application traffic simulation, and millions of HTTP/TCP connections/s and billions of concurrent connections; At the same time, it supports to simulate real attack traffic, malicious traffic and virus traffic, encryption and decryption protocols such as IPsec and SSL, and audio and video quality testing.

DarPeng2000E Application and Security Tester

DarPeng2000E is high-performance application and security tester launched by Xiner el for voice, video, data applications, and network security test. It accurately simulates the network access behavior of millions of real end users, and performs pressure and performance tests on application and security devices (such as Firewall/IPS/IDS/ WAF/DPI, etc.) or the entire system;By simulating a large amount of real attack traffic and malicious software and virus traffic, the detection and defense capabilities of network security devices and systems against attacks and viruses can be verified and tested. At the same time, the control and recognition capabilities of the tested device over traffic can be confirmed by replaying real environment traffic.

Collaborating with B/S architecture testing software ALPS (Application Layer Protocol Simulator) based on PCT architecture, which supports real application layer traffic simulation (such as application layer protocol HTTP/FTP/ TCP/DNS, voice: VoIP SIP&RTP, video: RSTP/RTP/IPTV, etc.), its HTTP/TCP can create millions of new connections and billions of concurrent connections; ALPS can simulate real attack traffic (DDoS attacks/botnets/custom attacks, etc.), malicious traffic, virus traffic. And ALPS supports audio and video quality testing.

▌ Key features

- **Comprehensive interfaces**
  Supports up to 4 100GE QSFP28 ports(compatible with 50G, 40G, 25G, 10G), 16 SFP+10GE ports, or 32 SFP 1GE ports.
- **Ultra high application protocol simulation capability**
  TCP Performance:
  8 million TCP new connections, 190 million TCP concurrent connections;
  HTTP Performance:
  6.4 million HTTP new connections, 170 million HTTP concurrent connections, and 196G HTTP throughput.
  HTTPS Performance:
  280000 new connections, 7 million concurrent HTTPS connections, and 70G HTTPS throughput;
- **Support network security device performance and capacity testing**
  Including firewalls, load balancers, WAFs, URL filters, antivirus, anti spyware, HTTP/HTTPS accelerators, WAN accelerators, IDS/IPS, and IPsec VPN gateways, etc
- **Support application server performance testing**
  Including web servers, mail servers, DHCP services, FTP servers, DNS servers, RTSP/RTP QuickTime streaming servers, multicast servers, etc
- **Support network security testing**
  Support simulation of attack traffic, virus traffic, and Cyber Range.

Protocols

Application	TCP, UDP, SCTP, WebSocket, DNS, HTTP, HTTPS, HTTP2, FTP, SSH, Telnet TFTP, RTMP, H.225, H.245, SMB, RPC, ONVIF, Chat applications (SKYPE, QQ, WeChat, etc.), E-mail applications (SMTP, POP3, IMAP, etc.), Gaming applications, video applications (Tencent Video, iQiyi, HLS, etc.), Download applications (BitTorrent, eDonkey, Xunlei, etc.), Social news applications (Tiktok, Toutiao, etc.), Payment applications, Database applications (Oracle, MySQL, MSSQL, etc.)
Industrial control protocol	ECHONET Lite, BACnet, Modbus, OPCUA, MQTT, ProfiNet (PNIO CM), OPC DA, IEC104, EtherNet/IP, ProfiNet (DCP), ENIP, IEEE C37.118 Synchronizer Omron Fins, S7comm, DNP3, Ether-S-I/O, CoAP
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, MPEG-TS, MPEG-1, MPEG-4)
DDoS	Support up to 73 types of DDoS attacks, including L2/L4 DDoS attacks (ARP/ICMP/UDP/TCP/IP/IGMP, etc.) and L7 Application Attacks (DNS Reflection, Slowloris slow attacks, etc.)
Virus and attack libraries	Covering over 7000 types of vulnerability attacks, over 40000 types of virus, and 73 types of DDoS attacks.
Access Protocol	IPv4, IPv6, 802.1Q (QinQ), DHCPv4/DHCPv6 client, DHCPv4/DHCPv6 server, PPPoEv4/PPPoEv6 client, PPPoEv4/PPPoEv6 server, IPsecv4/IPsecv6, GTP, 802.1x, IP/TCP+UDP/TCP/UDP, custom IPv6 extension headers and stream labels
Routing Protocol	SRv6 BE/SRv6 TE
Data encryption and decryption	SSLv3, TLSv1.0, TLSv1.1, TLSv1.2, TLSv1.3

Specifications

Port and Speed	• Up to 4 QSFP28 100G（compatible with 50G、40G、25G、10G） • Up to 16 SFP+ 10G/1G • Up to 32 SFP/RJ45 1G
Dimensions (W×H×D)	3U：438mm×132mm×500mm
Rack Mount	Mounted in rack that meets the IEC 297 standard
Weight (kg)	26KG
Temperature	0℃ ~ 40℃
Power	AC 110~230V；50Hz；10A
Max power consumption (W)	1500

Ordering informantion

Product Name	Product Description	Product Classification
DarPeng2000E	DarPeng2000E Appliance，support up to 8 slots	Chassis
K2-100G-1QSFP28-HQ	1 port 100G/50G/40G/25G/10G five speed high-performance test module	Test Module
K2-10G-4F-HD	4 ports SFP+ 10G/1G two speed high-performance test module	Test Module
K2-1G-4F-HS	4 ports SFP 1G high-performance test module	Test Module
K2-1G-4C-HT	4 ports RJ45 1G high-performance test module，support 10M/100M/1000M	Test Module