

DARPENG 2000

APPLICATION AND SECURITY TESTING

Built on new generation of x86 architecture, Xinertel DarPeng 2000 is a high-performance network tester uniquely designed for triple-play voice, video and data applications and network security, highlighting super capacity in operation, bandwidth, integration and efficiency.





DarPeng 2000 supports stress and performance tests on individual application-layer sensing devices (e.g. Firewall/IPS/IDS/WAF/DPI) or the whole systems by precisely emulating millions of real end-user and network behaviors. Moreover, it can emulate massive real attacks and virus traffic to validate and test the capacities of network security devices and systems in detecting and defending malware and hacking.

Combined with Application Layer Protocol Simulator (ALPS), the new B/S-backed test software with PCT architecture, this network device can support emulation of application-layer traffic covering protocols (HTTP/FTP/TCP/DNS), voices (VOIP SIP&RTP) and videos (RSTP/RTP/IPTV); enable millions of HTTP/TCP new connections and nearly 100 million of concurrent connections; and emulate real attack traffic (DDoS, botnet and custom attack), Fuzzing and virus.

Key Features

Comparability with variety of ports

Up to 2 100GbE QSFP28 ports (50GbE, 40GbE, 25GbE and 10GbE), 8 SFP+10GbE ports or 16 SFP 1GbE ports

► Fantastic emulation capability of application protocols

2.39 million of HTTP new collections, 80 million of HTTP concurrent connections and 91GbE HTTP throughput, which are realized by single DarPeng 2000 self-loop function with 2x100GbE port.

Performance and capacity tests on network security devices

Firewall, application firewall, load balancer, WAF, URL filter, antivirus software, spyware, HTTP/ HTTPS accelerator, WAN accelerator, IDS/IPS and IPSec VPN gateway, etc.

► Performance tests on application servers

Web server, mail server, DHCP mail server, FTP server, DNS server, RTSP/RTP QuickTime stream server, multicast server, etc.

Network security tests

Emulation of attack traffic, virus traffic and cyber range

Product Information

Item	Description	Category
DarPeng 2000 chassis	Host chassis available for 4 port modules	DarPeng series chassis
K1-100G-1QSFP28-HQ	1-port and 5-rate test module (100GbE /50GbE/40GbE/25GbE/10GbE)	DarPeng series test module
K1-10G-2F-HQ	2-port and SFP+ 10GbE/1GbE 2-rate test module	DarPeng series test module
K1-1G-4F-HQ	4-port and SFP 1GbE test module, supporting 1000M/100M optical-copper module	DarPeng series test module
K1-1G-4C-HQ	4-port RJ45 1GbE test module, supporting 10M/100M/1000M rate	DarPeng series test module

Supported Protocols		
Access protocols	IPv4, IPv6, 802.1Q, DHCP, PPP and IPsec, SSL VPN	
Application-layer protocols	HTTP, HTTPS, HTTP2, TCP, SCTP, FTP, DNS, SMTP, SSH, TFTP, Telnet, UDP	
	Application-Replay, BitTorrent, eDonkey, MySQL, Oracle, MSSQL, IMAP and POP3	
Voice	SIP/RTP, Voice Codec (PCMU, PCMA, G728, G729, G726-32, G723.1, G729AB) and MOS score	
Video	RTSP/RTP, Multicast and Video Codec (H.263, H.264, H.265)	
DDoS	L2/L4 DDoS Attacks (ARP/ICMP/UDP/TCP/IP/IGMP)	
	L4/L7 Application Attacks (DNS Flood/CC HTTP Flood/RUDY DDOS, etc.)	
Virus attack library	Cover over 10,000 security attacks, viruses and malicious codes	

DarPeng 2000 Application and Security Testing Specifications		
	Up to 2 QSFP28 100GbE ports (50GbE, 40GbE, 25GbE and 10GbE)	
Network port	Up to 8 SFP+ 10GbE/1GbE ports	
	Up to 16 SFP/RJ45 1GbE ports	
Size (H×W×D)	2U rack mount: 87 mm x 435mm x 779.8mm (3.4ins x 17.1ins x30.7ins) (hangers excluded)	
Installation	Suitable for the generic chassis that meets IEC 297 standards:	
	19 inches in width	
	1,000mm and above in depth	
Weight	26KG (about 57.3lbs)	
Working environment	Working temperature: 41°F to 113°F (5°C to 45°C)	
	Working humidity: 10%-90%	
	Storage temperature (with package): -40°F to 158°F (-40°C to 70°C)	
	Storage humidity (without package): -40°F to 131°F (-40°C to 55°C)	
Power supply	AC 110-230V, 50Hz and 10A	
Power consumption	<1300W	
Noise	49.8dBA	