



LANCOM vFirewall

Virtual firewall with UTM for next-generation security

vFirewall

Intelligent, consistent network security is no longer something to wish for, despite maximum flexibility and low operating and maintenance costs at the same time: Operated in cloud scenarios or conventional networks, the next-generation firewall (NGFW) LANCOM vFirewall offers the same security and functionality as the hardware-based LANCOM R&S®Unified Firewalls. It has no conventional hardware to take up space. The LANCOM vFirewall simply operates in a virtualized environment based on a hypervisor such as VMware ESX, Oracle VirtualBox, Microsoft Hyper-V, or KVM. The flexible licensing model allows your virtual firewall to „grow“ with your needs in terms of UTM performance and network size.

- Next-generation IT security through UTM „engineered in Germany“ and guaranteed freedom from backdoors for protection against spam, viruses and malware as well as cyber attacks
- State-of-the-art security techniques such as R&S®PACE2 Deep Packet Inspection and SSL Inspection
- Preventive security against as yet unknown threats through integrated Sandboxing and Machine Learning
- Custom application and filter rules for increased security via Application Management and Content Filter
- Virtual, software-based firewall for operation with VMware ESX, Oracle VirtualBox, Microsoft Hyper-V or KVM
- Intuitive network visualization for easy implementation of security and compliance requirements
- Convenient firewall management via intuitive Web interface, LANCOM Management Cloud, or LANCOM R&S®UF Command Center
- Operation in a high-availability cluster (HA cluster) possible without additional costs or licenses
- Runtime-based licensing model (1, 3, or 5 years) in sizes S to XL



LANCOM vFirewall

Our security pledge: next-generation security with UTM

With threats to networks constantly growing, trusted security is anything but a given. As the keystone of network security, next-generation firewalls (NGFW) combine common security mechanisms with the latest generation technologies. In the triad of security, compliance, and usability, the top priorities are effective protection of your network and maximum prevention against threats that are not yet known – this promise applies without restriction to all LANCOM R&S® Unified Firewalls and the LANCOM vFirewall. They are developed in Germany, are guaranteed to be free of hidden access options (backdoors), and thus bear the trust mark „IT Security made in Germany“.

Always and everywhere available

The LANCOM vFirewall is deployed with just a few clicks thanks to instant and anywhere deployment: At any location around the world, wherever a firewall is required, it is created automatically – without any shipping or hardware installation. Be it in a lab environment, in your own server room or data center, or in the cloud.

Flexible size

Thanks to its flexible and scalable licensing model, the LANCOM vFirewall can simply „grow“ with your needs and thus optimally adapt to your individual network requirements. For this purpose, licenses in sizes S to XL are available.

Fast recovery

The LANCOM vFirewall is easily and fully backed up to any storage medium at any time. This means that even in the event of server hardware failure, your firewall can immediately be restarted on another machine, so avoiding lengthy outages.

	LANCOM vFirewall - S	LANCOM vFirewall - M	LANCOM vFirewall - L	LANCOM vFirewall - XL
Cores	1	2	4	16
RAM	4	8	16	64
Max. recommended number of users *	20	100	200	500
VLAN	16	32	64	256

* When all UTM functions are used simultaneously by all users



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Features	Basic License	Full License	Feature description
Content Filter		✓	<ul style="list-style-type: none"> URL and content filter (incl. BPjM filter) Customizable rules for users Blacklists / whitelists Import / export of URL lists Category-based website blocking (individually definable) Online scan technology Based on HTTP(S) proxy Override function
Application Management		✓	<ul style="list-style-type: none"> Layer-7 packet filter (DPI) Filter by applications (e.g. Facebook, YouTube, BitTorrent, etc.) Blacklists / whitelists Protocol validation HTTP and IEC 104 decoder R&S@PACE 2 (Protocol and Application Classification Engine)
Anti-Virus		✓	<ul style="list-style-type: none"> HTTP/S, FTP, POP3/S, SMTP/S, IMAP/S Configurable exceptions Multi-level scanning (local and cloud-based) Sandboxing Fast classification of zero-day threats through AI technologies (machine learning)
Anti-Spam		✓	<ul style="list-style-type: none"> POP3/S, SMTP/S, IMAP/S Configurable scan levels GlobalView Cloud using Recurrent Pattern Detection (RPD) – spam detection based on the e-mail distribution patterns Blacklists / whitelists Automatic e-mail rejection/deletion
DNS Web Filter		✓	<ul style="list-style-type: none"> Filter by domain and content (incl. BPjM filter) Blacklists / Whitelists Import / export domain lists Category-based blocking of websites (individually configurable) Online scanning technology Based on DNS
IDS (Intrusion Detection System) / IPS (Intrusion Prevention System)		✓	<ul style="list-style-type: none"> Protection from DoS, port scans, malware, botnets, exploits, and vulnerabilities More than 40,000 active signatures Configurable exceptions Scans all interfaces
Proxies	HTTP VoIP	✓	<ul style="list-style-type: none"> HTTPS, FTP, POP3/S, SMTP/S, IMAP/S, SIP HTTP (transparent/non-transparent) Reverse proxy Supports Active Directory and local users Time-controlled
LAN-/WAN support	✓	✓	<ul style="list-style-type: none"> Ethernet 10 / 100 / 1,000 / 10,000 / 40,000 Mbps Configurable MTU (Ethernet/DSL) Link aggregation xDSL Multi-WAN (weighted policy-based routing/failover) Load balancing Time restrictions for Internet connections Multiple, dynamic DNS support DHCP DMZ SNAT
VLAN	✓	✓	<ul style="list-style-type: none"> 4,096 VLANs per interface 802.1q header tagging (packet-based tagged VLANs) Compatible with bridging



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Bridge mode	✓	✓	Layer-2 firewall Spanning Tree (bridge ID, port costs) Unlimited number of interfaces per bridge
Static routing	✓	✓	Freely configurable Multiple gateways configurable Policy-based routing based on input interface, source IP, output interface, destination IP
Dynamic routing	✓	✓	Exterior BGP Internal BGP Announced routes configurable
Traffic Shaping	✓	✓	Priority min. / max. bandwidth definable per traffic group (Quality of Service) Traffic grouping based on source application / destination / port / DSCP Different Traffic Shaping profiles selectable per WAN connection
Monitoring & statistics	✓	✓	Statistics (IDS/IPS, application control, surf control, antivirus/antispam) Logging to external syslog servers Export as CSV and XLS files SNMP/v2c and v3 Connection tracking Exportable executive report (PDF, HTML, CSV)
Administration	✓	✓	Object-oriented configuration Role-based administration IP-based access restriction for SSH and web client
Web interface	✓	✓	Self-explanatory functions Convenient wizard for initial setup Overview of the entire network Overview of all active services Browser-based, platform-independent View filtering based on custom tags
X.509 certificates	✓	✓	Support of certificates based on RSA / Elliptic Curves CRL (Certificate Revocation List) Multi-CA support Multi-host certificate support Certificate templates import / export via PEM / PKCS12 / DER
VPN	✓	✓	User authentication High availability Site-to-site and client-to-site Client configuration packages
IPSec	✓	✓	Full-tunnel mode Policybased or routebased IPSec IKEv1 (deprecated, upgrade to v2 strongly recommended), IKEv2 PSK (pre-shared key) / certificates DPD (Dead Peer Detection) NAT-T XAUTH, EAP Download portal for client configuration packages
SSL-VPN	✓	✓	Routing mode VPN Bridging mode VPN TCP/UDP Specification of WINS and DNS servers



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Features	Basic License	Full License	Feature description
Backup and restore	✓	✓	Local or remote access Automatic import during installation Automatic and scheduled backups Automatic upload (FTP, SCP) Disaster recovery from USB drive
User authentication	✓	✓	Active Directory import Local user administration Authentication via web or client Single sign-on (Kerberos) Multiple logins Captive portal Terminal Server Support (via Remote Desktop IP Virtualization)
HA (High Availability)	✓	✓	A second Unified Firewall of the same type is required Stateful failover Active/passive Hot standby



LANCOM vFirewall

Licenses (Basic)	Description	Item number
LANCOM vFirewall - S Basic License (1 Year)	License for activating the firewall functions of the LANCOM vFirewall (max. 1 core, 4 GB RAM), incl. Support & Updates, runtime 1 year	55186
LANCOM vFirewall - S Basic License (3 Years)	License for activating the firewall functions of the LANCOM vFirewall (max. 1 core, 4 GB RAM), incl. Support & Updates, runtime 3 years	55187
LANCOM vFirewall - S Basic License (5 Years)	License for activating the firewall functions of the LANCOM vFirewall (max. 1 core, 4 GB RAM), incl. Support & Updates, runtime 5 years	55188
LANCOM vFirewall - M Basic License (1 Year)	License for activating the firewall functions of the LANCOM vFirewall (max. 2 cores, 8 GB RAM), incl. Support & Updates, runtime 1 year	55192
LANCOM vFirewall - M Basic License (3 Years)	License for activating the firewall functions of the LANCOM vFirewall (max. 2 cores, 8 GB RAM), incl. Support & Updates, runtime 3 years	55193
LANCOM vFirewall - M Basic License (5 Years)	License for activating the firewall functions of the LANCOM vFirewall (max. 2 cores, 8 GB RAM), incl. Support & Updates, runtime 5 years	55194
LANCOM vFirewall - L Basic License (1 Year)	License for activating the firewall functions of the LANCOM vFirewall (max. 4 cores, 16 GB RAM), incl. Support & Updates, runtime 1 year	55198
LANCOM vFirewall - L Basic License (3 Years)	License for activating the firewall functions of the LANCOM vFirewall (max. 4 cores, 16 GB RAM), incl. Support & Updates, runtime 3 years	55199
LANCOM vFirewall - L Basic License (5 Years)	License for activating the firewall functions of the LANCOM vFirewall (max. 4 cores, 16 GB RAM), incl. Support & Updates, runtime 5 years	55200
LANCOM vFirewall - XL Basic License (1 Year)	License for activating the firewall functions of the LANCOM vFirewall (max. 16 cores, 64 GB RAM), incl. Support & Updates, runtime 1 year	55204
LANCOM vFirewall - XL Basic License (3 Years)	License for activating the firewall functions of the LANCOM vFirewall (max. 16 cores, 64 GB RAM), incl. Support & Updates, runtime 3 years	55205
LANCOM vFirewall - XL Basic License (5 Years)	License for activating the firewall functions of the LANCOM vFirewall (max. 16 cores, 64 GB RAM), incl. Support & Updates, runtime 5 years	55206



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Licenses (Full)	Description	Item number
LANCOM vFirewall - S Full License (1 Year)	License to activate the UTM & firewall functions of the LANCOM vFirewall (max. 1 core, 4 GB RAM), Sandboxing, Machine Learning, AV/Malware Protection, DPI, IDS/IPS, SSL Insp., incl. Support & Updates, runtime 1 year	55189
LANCOM vFirewall - S Full License (3 Years)	License to activate the UTM & firewall functions of the LANCOM vFirewall (max. 1 core, 4 GB RAM), Sandboxing, Machine Learning, AV/Malware Protection, DPI, IDS/IPS, SSL Insp., incl. Support & Updates, runtime 3 years	55190
LANCOM vFirewall - S Full License (5 Years)	License to activate the UTM & firewall functions of the LANCOM vFirewall (max. 1 core, 4 GB RAM), Sandboxing, Machine Learning, AV/Malware Protection, DPI, IDS/IPS, SSL Insp., incl. Support & Updates, runtime 5 years	55191
LANCOM vFirewall - M Full License (1 Year)	License to activate the UTM & firewall functions of the LANCOM vFirewall (max. 2 cores, 8 GB RAM), Sandboxing, Machine Learning, AV/Malware Protection, DPI, IDS/IPS, SSL Insp., incl. Support & Updates, runtime 1 year	55195
LANCOM vFirewall - M Full License (3 Years)	License to activate the UTM & firewall functions of the LANCOM vFirewall (max. 2 cores, 8 GB RAM), Sandboxing, Machine Learning, AV/Malware Protection, DPI, IDS/IPS, SSL Insp., incl. Support & Updates, runtime 3 years	55196
LANCOM vFirewall - M Full License (5 Years)	License to activate the UTM & firewall functions of the LANCOM vFirewall (max. 2 cores, 8 GB RAM), Sandboxing, Machine Learning, AV/Malware Protection, DPI, IDS/IPS, SSL Insp., incl. Support & Updates, runtime 5 years	55197
LANCOM vFirewall - L Full License (1 Year)	License to activate the UTM & firewall functions of the LANCOM vFirewall (max. 4 cores, 16 GB RAM), Sandboxing, Machine Learning, AV/Malware Protection, DPI, IDS/IPS, SSL Insp., incl. Support & Updates, runtime 1 year	55201
LANCOM vFirewall - L Full License (3 Years)	License to activate the UTM & firewall functions of the LANCOM vFirewall (max. 4 cores, 16 GB RAM), Sandboxing, Machine Learning, AV/Malware Protection, DPI, IDS/IPS, SSL Insp., incl. Support & Updates, runtime 3 years	55202
LANCOM vFirewall - L Full License (5 Years)	License to activate the UTM & firewall functions of the LANCOM vFirewall (max. 4 cores, 16 GB RAM), Sandboxing, Machine Learning, AV/Malware Protection, DPI, IDS/IPS, SSL Insp., incl. Support & Updates, runtime 5 years	55203
LANCOM vFirewall - XL Full License (1 Year)	License to activate the UTM & firewall functions of the LANCOM vFirewall (max. 16 cores, 64 GB RAM), Sandboxing, Machine Learning, AV/Malware Protection, DPI, IDS/IPS, SSL Insp., incl. Support & Updates, runtime 1 year	55207
LANCOM vFirewall - XL Full License (3 Years)	License to activate the UTM & firewall functions of the LANCOM vFirewall (max. 16 cores, 64 GB RAM), Sandboxing, Machine Learning, AV/Malware Protection, DPI, IDS/IPS, SSL Insp., incl. Support & Updates, runtime 3 years	55208
LANCOM vFirewall - XL Full License (5 Years)	License to activate the UTM & firewall functions of the LANCOM vFirewall (max. 16 cores, 64 GB RAM), Sandboxing, Machine Learning, AV/Malware Protection, DPI, IDS/IPS, SSL Insp., incl. Support & Updates, runtime 5 years	55209