Network security for small & medium enterprises (SME)



Cyber attacks no longer stop at smaller companies and medium-sized businesses. Whether it's small or home offices, medical practices, or law firms: multi-layered, trusted protection against threats of all kinds is essential, even for smaller networks. Stay one step ahead of threats with the desktop models of the next-generation firewalls (NGFW) including Unified Threat Management (UTM) and the "One-Click Security" concept in combination with the LANCOM Management Cloud – and all this in an uncomplicated, budget-friendly way, tailored to your requirements. All LANCOM R&S®Unified Firewalls are developed in Germany and guarantee freedom from backdoors.

→ Next-generation IT security through UTM "Made 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
- $\rightarrow\,$ Custom application and filter rules for increased security via Application Management and Content Filter
- → Convenient <u>firewall management</u> via intuitive Web interface, LANCOM Management Cloud, or LANCOM R&S®UF Command Center
- → LANCOM <u>Firewall Rack Mounts</u> for stable mounting in 19" cabinets available separately
- \rightarrow Also available as a virtual, software-based firewall (LANCOM vFirewall)
- → Operation in a high-availability cluster (HA cluster) possible without additional costs or licenses
- → Runtime-based licensing model (1, 3, or 5 years)



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, regardless whether they are <u>desktop</u> or <u>rack</u> models. All LANCOM R&S®Unified Firewalls 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".

Scaled to fit: firewall performance as needed

The firewall throughput requirements of a small doctor's office differ from those of an traditional office environment. This is precisely why our desktop models are designed to meet a wide range of demands. With the help of the <u>Firewall Finder</u>, you can select the LANCOM R&S®Unified Firewall that is precisely dimensioned for your intended use and the necessary data volume. Are you planning to grow? With the <u>rack models</u>, you can combine maximum system performance with flexible expansion options to meet your network requirements.

Intuitively simple: operating concept with graphical presentation

The digital sovereignty of smaller companies, branch offices, or retailers should not be compromised by highly complex firewall management. That is why the LANCOM R&S®Unified Firewalls offer simply secure usability. The intuitive "easy to use" operating concept focuses on a clear, graphical presentation of your settings, thus not only minimizing potential sources of error, but also saving a lot of time for troubleshooting. In this way, the firewalls enable a stress-free working life in which you can concentrate fully on your business – without worrying about network security.

Ready for industry: LANCOM R&S®Unified Firewall UF-T60

The sturdy housing of the LANCOM R&S®Unified Firewall UF-T60 can withstand harsh industrial conditions. Optimally tailored to the requirements and conditions of the industrial and manufacturing sector, the UF-T60 can be used, for example, to secure and log the remote maintenance of machines and to individually segment the machine network.



Convenient firewall management tools

Three <u>management tools</u> are available for central management and transparent monitoring of the LANCOM R&S[®]Unified Firewalls: A graphical Web interface supports you with clear dashboards for the detailed configuration of your firewalls, while the LANCOM Management Cloud manages all devices, networks, and configurations in a highly automated way for cloud-managed security. The <u>LANCOM R&S[®]UF Command</u> <u>Center</u> also allows centralized management of many firewalls.

Tutorial videos for firewall configuration

Despite a state-of-the-art security architecture, 99% of all security breaches are caused by misconfiguration of the devices used. To help you guard against this, our <u>step-by-step tutorials</u> provide you with helpful tips for setting up your LANCOM R&S®Unified Firewalls.



Complete overview of all LANCOM R&S®Unified Firewalls

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LANCOM R&S [®] Unified Firewall	UF-T60	UF-60 / UF-60 LTE	UF-160	UF-260	UF-360	UF-760
Category	Industrial	Desktop	Desktop	Desktop	Rack	Rack
Hardware properties						
Ports	5x GE copper, 2x SFP	4x GE copper	4x GE copper	4x GE copper, 1x SFP	6x GE copper, 2x SFP+	8x GE copper, 2x SFP+
Modem	-	LTE Advanced (only UF-60 LTE)	-	-	-	-
Opt. extension modules	-	-	-	-	yes (1G ETH, 1G SFP, 10G SFP+)	yes (1G ETH, 1G SFP, 10G SFP+, 40G QSFP+)
Power supply & memory redundancy	-	-	-	-	-	yes
Max. systemperformance (individu	al measurements)	*				
IPS / IDS throughput HTTPS (Mbps)	1,150	700	750	1,250	1,400	13,000
Firewall throughput TCP (Mbps)	3,700	3,500	3,550	4,450	11,600	49,830
VPN throughput IPSec (Mbps)	1,200	790	1,200	1,500	2,200	19,700
Concurrent sessions	1,000,000	1,000,000	1,000,000	2,000,000	4,000,000	16,700,000
Max. system performance (usage o	f all UTM functiona	allities) *				
UTM throughput HTTPS (Mbps)	200	150	170	340	420	3,400
Recom. number of VPN tunnels	25 – 50	5 – 25	25 - 50	100 – 200	200 – 1,000	1,000 – 5,000
Power						
Input voltage (V)	2× 12 – 36	100 – 240	100 – 240	100 – 240	100 – 240	100 – 240
Max. power consumption (W)	22.3	40	40	40	60	2× 300
Dimensions						
W x H x D (mm)	130 × 100 × 150	232 × 44 × 115 (without antennas for UF-60 LTE)	231 × 44 × 200	231 × 44 × 200	440 × 44 × 269	440 × 44 × 364

* All throughput rates measured bidirectionallywith 1,500 bytes packet size.



Features	Basic License	Full License	Feature description
Content Filter		√	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 *		√	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 "		√	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 *		√	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		√	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) *		√	Protection from DoS, port scans, malware, botnets, exploits, and vulnerabilities More than 40,000 active signatures Configurable exceptions Scans all interfaces
Proxies	HTTP VoIP	√	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	V	√	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	√	√	4,096 VLANs per interface 802.1q header tagging (packet-based tagged VLANs) Compatible with bridging

Not available for LANCOM R&S $^{\circ}$ Unified Firewall UF-50 and UF-100 Not available for LANCOM R&S $^{\circ}$ Unified Firewall UF-50

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Features	Basic License	Full License	Feature description
Bridge mode	V	V	Layer-2 firewall Spanning Tree (bridge ID, port costs) Unlimited number of interfaces per bridge
Static routing	V	V	Freely configurable Multiple gateways configurable Policy-based routing based on input interface, source IP, output interface, destination IP
Dynamic routing	V	V	Exterior BGP Internal BGP Announced routes configurable
Traffic Shaping	√	V	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	V	V	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	V	V	Object-oriented configuration Role-based administration IP-based access restriction for SSH and web client
Web interface	V	V	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	V	V	Support of certificates based on RSA / Eliptic Curves CRL (Certificate Revocation List) Multi-CA support Multi-host certificate support Certificate templates import / export via PEM / PKCS12 / DER
VPN	V	V	User authentication High availability Site-to-site and client-to-site Client configuration packages
IPSec	V	V	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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LANCOM R&S®Unified Firewalls Desktop models

Features	Basic License	Full License	Feature description
Backup and restore	V	V	Local or remote access Automatic import during installation Automatic and scheduled backups Automatic upload (FTP, SCP) Disaster recovery from USB drive
User authentication	V	√	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) ***	V	√	A second Unified Firewall of the same type is required Stateful failover Active/passive Hot standby



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LANCOM R&S®Unified Firewalls Desktop models

Support				
Warranty	3 years For details, please refer to the general warranty conditions at: <u>www.lancom-systems.com/warranty-</u>	conditions		
Manufacturer support	Free technical manufacturer support with activated license for all desktop models (Service Category	s).		
Hardware Appliances		Item no.		
LANCOM R&S Unified Firewall UF-60	Next-generation UTM firewall, 4x GE, UF-60 Basic License or Full License mandatory for operation	55002		
LANCOM R&S Unified Firewall UF-60 LTE	Next-generation UTM firewall, 4x GE, 1x LTE Cat-7 up to 300 MBit/s, UF-60 Basic License or Full License mandatory for operation	55003		
LANCOM R&S Unified Firewall UF-T60	Next-generation UTM firewall, 6x GE, 2x SFP, UF-T60 Basic License or Full License mandatory for operation	55004		
LANCOM R&S Unified Firewall UF-160	Next-generation UTM firewall, 4x GE, UF-1XX Basic License or Full License mandatory for operation	55012		
LANCOM R&S Unified Firewall UF-260	Next-generation UTM firewall, 4x GE, 1x SFP, UF-2XX Basic License or Full License mandatory for operation	55024		
Accessories *		Item no.		
LANCOM UF Rack Mount UF-60	Mounting material for UF-60 / UF-60 LTE for installation in a 19" rack, occupies one height unit	55128		
LANCOM Firewall Rack Mount UF-100/200	Mounting material for UF-100/200 for installation in a 19" rack, occupies one height unit	55120		
LANCOM UF Rack Mount UF-160/260	Mounting material for UF-160/260 for installation in a 19" rack, occupies one height unit	55125		
LANCOM SFP Modules	An overview of the LANCOM SFP Modules compatible with the LANCOM R&S®Unified Firewalls can under <u>www.lancom-systems.com/products/software-accessories/accessories/lancom-sfp-modules</u>	be found		
LANCOM DAC Cables	An overview of the LANCOM DAC Cables compatible with the LANCOM R&S®Unified Firewalls can be found under <u>www.lancom-systems.com/products/software-accessories/accessories/lancom-direct-attach-cable</u>			
Options				
LANCOM Warranty Basic Option	Option for extending the manufacturer warranty from 3 to 5 years.			
	Device assignment: www.lancom-systems.com/products/services-support/lancom-warranty-basic-option			
LANCOM Warranty Advanced Option	Option for extending the manufacturer warranty from 3 to 5 years, and advanced replacement on hardw	vare failure.		
	Device assignment: www.lancom-systems.com/products/services-support/lancom-warranty-advanced-option			
LANCOM Service Pack 10/5	Direct manufacturer support access, 10/5 availability and 4 hours response SLA, next business day advance replacement in metropolitan areas within the EU and within warranty			
	Device assignment: www.lancom-systems.com/products/services-support/lancom-service-pack-10/5			
LANCOM Service Pack 24/7	Direct manufacturer support access,24/7 availability and 30 min response SLA (for major incidents), day advance replacement within warranty (EU only)	next working		
	Device assignment: www.lancom-systems.com/products/services-support/lancom-service-pack-24/7			

Please note that support service for third-party accessories is excluded.

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LANCOM R&S®Unified Firewalls Desktop models

License category B	LANCOM Management Cloud license for the management & monitoring of a category B device. Specif	ication of			
	the LMC project ID and project information needed, incl. updates.				
	Device assignment: www.lancom-systems.com/products/network-management/lancom-management-cloud/lmc-licenses				
License category C	LANCOM Management Cloud license for the management & monitoring of a category C device. Specif the LMC project ID and project information needed, incl. updates.	ication of			
	Device assignment: www.lancom-systems.com/products/network-management/lancom-management-cloud/lmc-licenses				
Licenses LANCOM R&S®UF Comman	d Center				
LANCOM R&S®UF Command Center Licenses for 10 / 25 / 100 devices with terms from 1 / 3 / 5 years	Licenses for activation of the LANCOM R&S®UF Command Center for management & monitoring of LANCOM R&S®Unified Firewalls, incl. support & updates				
	Device assignment: www.lancom-systems.com/products/security/uf-command-center				
Licenses (Basic)		ltem no			
	atus at any time in the Web GUI of your firewall in the "Licenses" section! Please note that once a licen o longer possible and the entitlement to support and software updates no longer applies.	se has			
LANCOM R&S UF-50-1Y Basic License (1 Year)	License for activating firewall functionalities of the UF-50, SSL Insp., Content Filter, incl. updates, runtime 1 year	55098			
LANCOM R&S UF-50-3Y Basic License (3 Years)	License for activating firewall functionalities of the UF-50, SSL Insp., Content Filter, incl. updates, runtime 3 years	55099			
LANCOM R&S UF-50-5Y Basic License (5 Years)	License for activating firewall functionalities of the UF-50, SSL Insp., Content Filter, incl. updates, runtime 5 years	55100			
LANCOM R&S UF-60-1Y Basic License (1 Year)	License for activating basic firewall functionalities (up to layer 4) of the UF-60 / UF-60 LTE, incl. VPN and user mgmt., incl. updates, runtime 1 year	55080			
LANCOM R&S UF-60-1Y Basic License (3 Years)	License for activating basic firewall functionalities (up to layer 4) of the UF-60 / UF-60 LTE, incl. VPN and user mgmt., incl. updates, runtime 3 years	55081			
LANCOM R&S UF-60-1Y Basic License (5 Years)	License for activating basic firewall functionalities (up to layer 4) of the UF-60 / UF-60 LTE, incl. VPN and user mgmt., incl. updates, runtime 5 years	55082			
LANCOM R&S UF-T60-1Y Basic License (1 Year)	License for activating basic firewall functionalities (up to layer 4) of the UF-T60, incl. VPN and user mgmt., incl. updates, runtime 1 year	55159			
LANCOM R&S UF-T60-1Y Basic License (3 Years)	License for activating basic firewall functionalities (up to layer 4) of the UF-T60, incl. VPN and user mgmt., incl. updates, runtime 3 years	55160			
LANCOM R&S UF-T60-1Y Basic License (5 Years)	License for activating basic firewall functionalities (up to layer 4) of the UF-T60, incl. VPN and user mgmt., incl. updates, runtime 5 years	5516′			
LANCOM R&S UF-1XX-1Y Basic License (1 Year)	License for activating basic firewall functionalities (up to layer 4) of the UF-1xx, incl. VPN and user mgmt., incl. updates, runtime 1 year	55083			
LANCOM R&S UF-1XX-3Y Basic License (3 Years)	License for activating basic firewall functionalities (up to layer 4) of the UF-1xx, incl. VPN and user mgmt., incl. updates, runtime 3 years	55084			
LANCOM R&S UF-1XX-5Y Basic License (5 Years)	License for activating basic firewall functionalities (up to layer 4) of the UF-1xx, incl. VPN and user mgmt., incl. updates, runtime 5 years	55085			
LANCOM R&S UF-2XX-1Y Basic License (1 Year)	License for activating basic firewall functionalities (up to layer 4) of the UF-2xx, incl. VPN and user mgmt., incl. updates, runtime 1 year	55086			
LANCOM R&S UF-2XX-3Y Basic License (3 Years)	License for activating basic firewall functionalities (up to layer 4) of the UF-2xx, incl. VPN and user mgmt., incl. updates, runtime 3 years	55087			
LANCOM R&S UF-2XX-5Y Basic License (5 Years)	License for activating basic firewall functionalities (up to layer 4) of the UF-2xx, incl. VPN and user mgmt., incl. updates, runtime 5 years	55088			



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Licenses (Full)		ltem no.			
You can check the current license status at any time in the Web GUI of your firewall in the "Licenses" section! Please note that once a license has expired, configuration changes are no longer possible and the entitlement to support and software updates no longer applies.					
LANCOM R&S UF-60-1Y Full License (1 Year)	License for activating UTM- and firewall functionalities of the UF-60 / UF-60 LTE, sandboxing, machine learning, AV/Malware Protection, SSL Insp., incl. DPI and IDS/IPS, incl. updates, runtime 1 year	55077			
LANCOM R&S UF-60-1Y Full License (3 Years)	License for activating UTM- and firewall functionalities of the UF-60 / UF-60 LTE, sandboxing, machine learning, AV/Malware Protection, SSL Insp., incl. DPI and IDS/IPS, incl. updates, runtime 3 years	55078			
LANCOM R&S UF-60-1Y Full License (5 Years)	License for activating UTM- and firewall functionalities of the UF-60 / UF-60 LTE, sandboxing, machine learning, AV/Malware Protection, SSL Insp., incl. DPI and IDS/IPS, incl. updates, runtime 5 years	55079			
LANCOM R&S UF-T60-1Y Full License (1 Year)	License for activating UTM- and firewall functionalities of the UF-T60, sandboxing, machine learning, AV/Malware Protection, SSL Insp., incl. DPI and IDS/IPS, incl. updates, runtime 1 year	55162			
LANCOM R&S UF-T60-1Y Full License (3 Years)	License for activating UTM- and firewall functionalities of the UF-T60, sandboxing, machine learning, AV/Malware Protection, SSL Insp., incl. DPI and IDS/IPS, incl. updates, runtime 3 years	55163			
LANCOM R&S UF-T60-1Y Full License (5 Years)	License for activating UTM- and firewall functionalities of the UF-T60, sandboxing, machine learning, AV/Malware Protection, SSL Insp., incl. DPI and IDS/IPS, incl. updates, runtime 5 years	55164			
LANCOM R&S UF-1XX-1Y Full License (1 Year)	License for activating UTM- and firewall functionalities of the UF-1xx, sandboxing, machine learning, AV/Malware Protection, SSL Insp., incl. DPI and IDS/IPS for UF-160, incl. updates, runtime 1 year	55101			
LANCOM R&S UF-1XX-3Y Full License (3 Years)	License for activating UTM- and firewall functionalities of the UF-1xx, sandboxing, machine learning, AV/Malware Protection, SSL Insp., incl. DPI and IDS/IPS for UF-160, incl. updates, runtime 3 years	55102			
LANCOM R&S UF-1XX-5Y Full License (5 Years)	License for activating UTM- and firewall functionalities of the UF-1xx, sandboxing, machine learning, AV/Malware Protection, SSL Insp., incl. DPI and IDS/IPS for UF-160, incl. updates, runtime 5 years	55103			
LANCOM R&S UF-2XX-1Y Full License (1 Year)	License for activating UTM- and firewall functionalities of the UF-2xx, sandboxing, machine learning, AV/Malware Protection, SSL Insp., incl. DPI and IDS/IPS, incl. updates, runtime 1 year	55104			
LANCOM R&S UF-2XX-3Y Full License (3 Years)	License for activating UTM- and firewall functionalities of the UF-2xx, sandboxing, machine learning, AV/Malware Protection, SSL Insp., incl. DPI and IDS/IPS, incl. updates, runtime 3 years	55105			
LANCOM R&S UF-2XX-5Y Full License (5 Years)	License for activating UTM- and firewall functionalities of the UF-2xx, sandboxing, machine learning, AV/Malware Protection, SSL Insp., incl. DPI and IDS/IPS, incl. updates, runtime 5 years	55106			

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