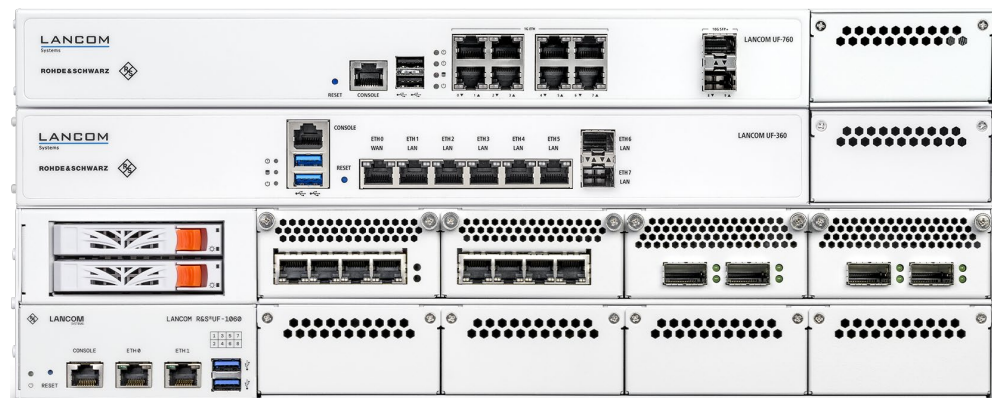


LANCOM R&S® Unified Firewalls Rack models

Network security for large, distributed enterprises and schools



Phishing, advanced persistent threats, DDoS attacks... The threat situation for companies is getting more serious every day. Especially growing, distributed enterprises with demanding networks and high data volumes need powerful security technologies. With the rack models of the next-generation firewalls (NGFW) and Unified Threat Management (UTM), you rely on a holistic security solution. With the „One-Click Security“ concept of the LANCOM Management Cloud, precisely tailored security architectures are implemented in an automated, transparent, and uncomplicated manner. All LANCOM R&S® Unified Firewalls are developed in Germany and guarantee freedom from backdoors.

- 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
- Convenient firewall management via intuitive Web interface, LANCOM Management Cloud, or LANCOM R&S®UF Command Center
- LANCOM UF Extension Modules for port expansion and maximum flexibility available separately
- 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)



LANCOM R&S®Unified Firewalls

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 desktop or rack 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“.

In addition, the system blocks malicious data traffic in IPS mode and uses virtual patching to prevent known gaps and vulnerabilities from being exploited. In the event of a „false alarm“, the admin can allow the corresponding data traffic.

Powerful: convincing firewall performance

Large and distributed enterprises as well as schools have particularly high demands on the data throughput of firewalls. Even in large IT infrastructures, our high-performance, future-proof rack models of the LANCOM R&S®Unified Firewalls impress with high and concentrated data volumes. The UF-1060 in particular, with its 100G interface and 10G UTM performance, offers the necessary performance to implement high-throughput security functions for branch infrastructures on the central site. For maximum connection flexibility, you can add additional ports to the Rack Unified Firewalls with optional extension modules and thus individually adapt them to your network requirements..

Concise: intuitive usability

Especially in large networks of enterprises and schools with numerous firewall rules, simple firewall management is valuable. That is why the LANCOM R&S®Unified Firewalls offer an intuitive „easy to use“ operating concept that focuses on a clear, graphical representation of your settings. This not only minimizes potential sources of error, but also saves a lot of time on troubleshooting. As a result, the firewalls enable a stress-free working life in which you can concentrate fully on your business – without worrying about network security.

Clever storage and power supply redundancy

Better safe than sorry: the LANCOM R&S®Unified Firewalls UF-1060 and UF-760 protect protect your operation with storage and power supply redundancy. On the one hand, this ensures that the devices can continue to function smoothly even if one power supply unit fails. In addition, multiple storage of data ensures simple and fast recovery in the event of deletion or damage.



LANCOM R&S®Unified Firewalls

Convenient firewall management tools

Three management tools 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 LANCOM R&S®UF Command Center 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 step-by-step tutorials provide you with helpful tips for setting up your LANCOM R&S®Unified Firewalls.



LANCOM R&S®Unified Firewalls

Overview of all LANCOM R&S®Unified Firewalls (Rack models)

LANCOM R&S®Unified Firewall			
	UF-360	UF-760	UF-1060
Category	Rack	Rack	Rack / 2HE
Hardware properties			
Ports	6x GE copper, 2x SFP+	8x GE copper, 2x SFP+	2x GE copper
Modem	–	–	–
Power supply & memory redundancy	–	Hot-swappable PSU & SSDs	Hot-swappable PSU & SSDs
Opt. extension modules *	yes (1G ETH, 1G SFP, 10G SFP+)	yes (1G ETH, 1G SFP, 10G SFP+, 40G QSFP+)	yes, 8 slots (1G ETH, 1G SFP, 10G SFP+ , 40G QSFP+ , 100G QSFP28)
Mounting options	Mounting brackets	Extension rails	Mounting brackets and extension rails
Max. systemperformance (individual measurements) **			
IPS / IDS throughput HTTPS (Mbps)	1,400	13,000	20,000
Firewall throughput TCP (Mbps)	11,600	49,830	100,000
VPN throughput IPSec (Mbps)	2,200	19,700	40,000
Concurrent sessions	4,000,000	16,700,000	66,800,000
Max. system performance (usage of all UTM functionalities) **			
UTM throughput HTTPS (Mbps)	420	3,400	12,000
Recom. number of VPN tunnels	200 – 1,000	1,000 – 5,000	5,000 – 10,000
Power			
Input voltage (V)	100 – 240	100 – 240	100 – 240
Max. power consumption (W)	60	300 (redundantly designed)	550 (redundantly designed)
Dimensions			
W x H x D (mm) without mounting brackets	440 x 44 x 269	440 x 44 x 364	440 x 88 x 603

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

** Compatible LANCOM UF Extension Modules can be found on the [product website](#).



LANCOM R&S®Unified Firewalls

Overview of all LANCOM R&S®Unified Firewalls (Desktop models)



LANCOM R&S®Unified Firewall	UF-T60	UF-60 / UF-60 LTE	UF-160	UF-260
Category	Industrial	Desktop	Desktop	Desktop
Hardware properties				
Ports	5x GE copper, 2x SFP	4x GE copper	4x GE copper	4x GE copper, 1x SFP
Modem	–	LTE Advanced (only UF-60 LTE)	–	–
Power supply & memory redundancy	–	–	–	–
Opt. extension modules	–	–	–	–
Mounting options	DIN rail mounting	Opt. LANCOM Firewall Rack Mount UF-60 (55128)	Opt. LANCOM Firewall Rack Mount UF-160/260 (55125)	Opt. LANCOM Firewall Rack Mount UF-160/260 (55125)
Max. systemperformance (individual measurements) **				
IPS / IDS throughput HTTPS (Mbps)	1,150	700	750	1,250
Firewall throughput TCP (Mbps)	3,700	3,500	3,550	4,450
VPN throughput IPSec (Mbps)	1,200	790	1,200	1,500
Concurrent sessions	1,000,000	1,000,000	1,000,000	2,000,000
Max. system performance (usage of all UTM functionalities) **				
UTM throughput HTTPS (Mbps)	200	150	170	340
Recom. number of VPN tunnels	25 – 50	5 – 25	25 – 50	100 – 200
Power				
Input voltage (V)	12 – 36	100 – 240	100 – 240	100 – 240
Max. power consumption (W)	22.3 (redundantly designed)	40	40	40
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

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



LANCOM R&S®Unified Firewalls

Features	Basic License	Full License	Feature description
Administration	✓	✓	Object-oriented configuration Role-based administration IP-based access restriction for SSH and web client
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-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
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)
Backup and restore	✓	✓	Local or remote access Automatic import during installation Automatic and scheduled backups Automatic upload (FTP, SCP) Disaster recovery from USB drive
Bridge mode	✓	✓	Layer-2 firewall Spanning Tree (bridge ID, port costs) Unlimited number of interfaces per bridge
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
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
Dynamic routing	✓	✓	Exterior BGP Internal BGP Announced routes configurable
HA (High Availability)	✓	✓	A second Unified Firewall of the same type is required Stateful failover Active/passive (hot standby) Failover even in the event of interface failure
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



LANCOM R&S® Unified Firewalls

Features	Basic License	Full License	Feature description
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 Can be used as a complete LANCOM Trusted Access Gateway
LAN-/WAN support	✓	✓	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 client for WAN DHCP server for LAN DMZ SNAT
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) Delivery of the Executive Report via e-mail Dashboard Hardware Monitoring
Packet filter	✓	✓	Stateful filter Rule objects based on source IP, source interface, DNS name, users / groups, VPN Rule connection based on protocol, source- and destination port
Proxies	HTTP VoIP	✓	FTP/S, POP3/S, SMTP/S, IMAP/S HTTP/S transparent HTTP/S non-transparent (supports AD / local users) Reverse Proxy (supports SAML / AD / local users) Time-controlled
SSL-VPN	✓	✓	Routing mode VPN Bridging mode VPN TCP/UDP Specification of WINS and DNS servers
Static routing	✓	✓	Freely configurable Multiple gateways configurable Policy-based routing based on input interface, source IP, output interface, destination IP
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
User administration (local)	✓	✓	Active Directory import (LDAP / Kerberos) SSO via Kerberos SAML authentication (Keycloak / MS Entra ID) Browser- or client-based registration Simultaneous multi-sessions Captive Portal Terminal server support (via Remote Desktop IP virtualization)
VLAN	✓	✓	4,096 VLANs per interface 802.1q header tagging (packet-based tagged VLANs) Compatible with bridging



LANCOM R&S® Unified Firewalls

Features	Basic License	Full License	Feature description
VPN	✓	✓	User authentication High availability Site-to-site and client-to-site Client configuration packages
WAN support (IPv6)	✓	✓	Ethernet 10 / 100 / 1,000 / 10,000 / 40,000 Mbps Customizable MTU (Ethernet / DSL) Link Aggregation xDSL GPON (UF-260 only) Multi WAN (weighted policy-based routing / failover) Time restrictions for Internet connections Support for both multiple and dynamic DNS servers DHCP client for WAN IPSec tunnel (IPv6 gateway addresses) Reverse Proxy
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 Clear, visual rule inheritance
Wireguard	✓	✓	Quick and easy to configure Site-to-site, choice between 2 Unified Firewalls or Unified Firewall and third-party products Client-to-site with Windows, Linux, Android, iOS State-of-the-art cryptography protocols
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



LANCOM R&S® Unified Firewalls

Hardware Appliances		Item no.
LANCOM R&S Unified Firewall UF-360	Next-generation UTM firewall, 5x GE, 2x SFP+, slot for optional extension module (see Accessories), UF-360 Basic License or Full License mandatory for operation	55034
LANCOM R&S Unified Firewall UF-760	Next-generation UTM firewall, 8x GE, 2x SFP+, slot for optional extension module (see Accessories), UF-760 Basic License or Full License mandatory for operation	55035
LANCOM R&S Unified Firewall UF-1060	Next-generation UTM firewall (2HU), 2x GE, slot for optional extension module (GE, SFP, SFP+, QSFP+, QSFP28), incl. Rack Mount, 3 years replacement service; UF-1060 Basic License or Full License mandatory for operation	55038
Support		
Warranty extension	Free warranty extension up to 3 years (replacement service for defects) For details, please refer to the service and support conditions at www.lancom-systems.com/support-conditions or at www.lancom-systems.com/rma .	
Firmware releases	Regular free updates including new features & security updates as part of the LANCOM Lifecycle Management (depending on the license validity, see www.lancom-systems.com/lifecycle)	
Manufacturer support	For LANcommunity partners during the license validity For end customers with LANcare Direct or LANcare Premium Support during the license and LANcare validity	
Declarations of Conformity	You will find all the Declarations of Conformity concerning our product portfolio under www.lancom-systems.com/doc . These documents contain all the tested standards and required guidelines in the area of EMC - SAFETY - RF, as well as the proof of the guidelines concerning RoHS & REACH.	
LANcare Basic	Security updates until EOL (min. 5 years) and 5 years replacement service with shipment of the replacement device within 5 days after arrival of the defective device (8/5/5Days)	
	www.lancom-systems.com/products/services-support/lancare/lancare-basic	
	LANcare Basic M for UF-360	10721
	LANcare Basic XL for UF-760, UF-1060	10723
LANcare Advanced	Security updates until EOL (min. 5 years) and 5 years NBD advance replacement with delivery of the replacement device within one business day (8/5/NBD)	
	www.lancom-systems.com/products/services-support/lancare/lancare-advanced	
	LANcare Advanced M for UF-360	10731
	LANcare Advanced XL for UF-760, UF-1060	10733
LANcare Direct 10/5	Direct, prioritized 10/5 manufacturer support and security updates for the device, guaranteed first response times (SLA) of max. 2 hours for reporting massive operational disruptions by telephone (priority 1) and max. 4 hours for all other concerns (priority 2), term-based for 1, 3, or 5 years	
	www.lancom-systems.com/products/services-support/lancare/lancare-direct-10-5	
	LANcare Advanced M for UF-360	
		1 year 10743
		3 years 10744
		5 years 10745
	LANcare Advanced XL for UF-760, UF-1060	
		1 year 10749
		3 years 10750
		5 years 10751



LANCOM R&S®Unified Firewalls

LANcare Direct 24/7

Direct, prioritized 10/5 manufacturer support incl. 24/7 emergency hotline and security updates for the device, guaranteed first response times (SLA) of max. 30 minutes for reporting massive operational disruptions by telephone (priority 1) and max. 4 hours for all other concerns (priority 2), term-based for 1, 3, or 5 years

www.lancom-systems.com/products/services-support/lancare/lancare-direct-24-7

LANcare Direct 24/7 M for UF-360

1 year	10755
3 years	10756
5 years	10757

LANcare Direct 24/7 XL for UF-760, UF-1060

1 year	10761
3 years	10762
5 years	10763

LANcare Direct Advanced 10/5

Direct, prioritized 10/5 manufacturer support and security updates for the device, NBD advance replacement with delivery of the device on the next business day (10/5/NBD), guaranteed first response times (SLA) of max. 2 hours for reporting massive operational disruptions by telephone (priority 1) and max. 4 hours for all other concerns (priority 2), term-based for 1, 3, or 5 years

www.lancom-systems.com/products/services-support/lancare/lancare-direct-advanced-10-5

LANcare Direct Advanced 10/5 M for UF-360

1 year	10767
3 years	10768
5 years	10769

LANcare Direct Advanced 10/5 XL for UF-760, UF-1060

1 year	10773
3 years	10774
5 years	10775

LANcare Direct Advanced 24/7

Direct, prioritized 10/5 manufacturer support incl. 24/7 emergency hotline and security updates for the device, NBD advance replacement with delivery of the device on the next business day (24/7/NBD), guaranteed first response times (SLA) of max. 30 minutes for reporting massive operational disruptions by telephone (priority 1) and max. 4 hours for all other concerns (priority 2), term-based for 1, 3, or 5 years

www.lancom-systems.com/products/services-support/lancare/lancare-direct-advanced-24-7

LANcare Direct Advanced 24/7 M for UF-360

1 year	10779
3 years	10780
5 years	10781

LANcare Direct Advanced 24/7 XL for UF-760, UF-1060

1 year	10785
3 years	10786
5 years	10787

Accessories *

LANCOM UF Extension Modules

An overview of the LANCOM UF Extension Modules compatible with the LANCOM R&S®Unified Firewalls can be found under
www.lancom-systems.com/products/software-accessories/accessories/lancom-uf-extension-modules

LANCOM SFP Modules

An overview of the LANCOM SFP Modules compatible with the LANCOM R&S®Unified Firewalls can be found under
www.lancom-systems.com/products/software-accessories/accessories/lancom-sfp-modules

LANCOM DAC Cables

An overview of the LANCOM DAC Cables compatible with the LANCOM R&S®Unified Firewalls can be found under
www.lancom-systems.com/products/software-accessories/accessories/lancom-direct-attach-cable

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



LANCOM R&S®Unified Firewalls

Licenses LANCOM Management Cloud

License category C, D LANCOM Management Cloud license for the management & monitoring of a category C or D device. Specification 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

Licenses LANCOM R&S®UF Command 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)

Item 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-360-1Y Basic License (1 Year)	License for activating basic firewall functionalities (up to layer 4) of the UF-360, incl. VPN and user mgmt., incl. updates, runtime 1 year	55132
LANCOM R&S UF-360-3Y Basic License (3 Years)	License for activating basic firewall functionalities (up to layer 4) of the UF-360, incl. VPN and user mgmt., incl. updates, runtime 3 years	55133
LANCOM R&S UF-360-5Y Basic License (5 Years)	License for activating basic firewall functionalities (up to layer 4) of the UF-360, incl. VPN and user mgmt., incl. updates, runtime 5 years	55134
LANCOM R&S UF-760-1Y Basic License (1 Year)	License for activating basic firewall functionalities (up to layer 4) of the UF-760, incl. VPN and user mgmt., incl. updates, runtime 1 year	55141
LANCOM R&S UF-760-3Y Basic License (3 Years)	License for activating basic firewall functionalities (up to layer 4) of the UF-760, incl. VPN and user mgmt., incl. updates, runtime 3 years	55142
LANCOM R&S UF-760-5Y Basic License (5 Years)	License for activating basic firewall functionalities (up to layer 4) of the UF-760, incl. VPN and user mgmt., incl. updates, runtime 5 years	55143
LANCOM R&S UF-1060-1Y Basic License (1 Year)	License for activating basic firewall functionalities (up to layer 4) of the UF-1060, incl. VPN and user mgmt., incl. updates, runtime 1 year	55210
LANCOM R&S UF-1060-3Y Basic License (3 Years)	License for activating basic firewall functionalities (up to layer 4) of the UF-1060, incl. VPN and user mgmt., incl. updates, runtime 3 years	55211
LANCOM R&S UF-1060-5Y Basic License (5 Years)	License for activating basic firewall functionalities (up to layer 4) of the UF-1060, incl. VPN and user mgmt., incl. updates, runtime 5 years	55212



LANCOM R&S®Unified Firewalls

Licenses (Full)		Item 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-360-1Y Full License (1 Year)	License for activating UTM- and firewall functionalities of the UF-360, sandboxing, machine learning, AV/Malware Protection, SSL Insp., incl. DPI and IDS/IPS, incl. updates, runtime 1 year	55135
LANCOM R&S UF-360-3Y Full License (3 Years)	License for activating UTM- and firewall functionalities of the UF-360, sandboxing, machine learning, AV/Malware Protection, SSL Insp., incl. DPI and IDS/IPS, incl. updates, runtime 3 years	55136
LANCOM R&S UF-360-5Y Full License (5 Years)	License for activating UTM- and firewall functionalities of the UF-360, sandboxing, machine learning, AV/Malware Protection, SSL Insp., incl. DPI and IDS/IPS, incl. updates, runtime 5 years	55137
LANCOM R&S UF-760-1Y Full License (1 Year)	License for activating UTM- and firewall functionalities of the UF-760, sandboxing, machine learning, AV/Malware Protection, SSL Insp., incl. DPI and IDS/IPS, incl. updates, runtime 1 year	55144
LANCOM R&S UF-760-3Y Full License (3 Years)	License for activating UTM- and firewall functionalities of the UF-760, sandboxing, machine learning, AV/Malware Protection, SSL Insp., incl. DPI and IDS/IPS, incl. updates, runtime 3 years	55145
LANCOM R&S UF-760-5Y Full License (5 Years)	License for activating UTM- and firewall functionalities of the UF-760, sandboxing, machine learning, AV/Malware Protection, SSL Insp., incl. DPI and IDS/IPS, incl. updates, runtime 5 years	55146
LANCOM R&S UF-1060-1Y Full License (1 Year)	License for activating UTM- and firewall functionalities of the UF-1060, sandboxing, machine learning, AV/Malware Protection, SSL Insp., incl. DPI and IDS/IPS, incl. updates, runtime 1 year	55213
LANCOM R&S UF-1060-3Y Full License (3 Years)	License for activating UTM- and firewall functionalities of the UF-1060, sandboxing, machine learning, AV/Malware Protection, SSL Insp., incl. DPI and IDS/IPS, incl. updates, runtime 3 years	55214
LANCOM R&S UF-1060-5Y Full License (5 Years)	License for activating UTM- and firewall functionalities of the UF-1060, sandboxing, machine learning, AV/Malware Protection, SSL Insp., incl. DPI and IDS/IPS, incl. updates, runtime 5 years	55215