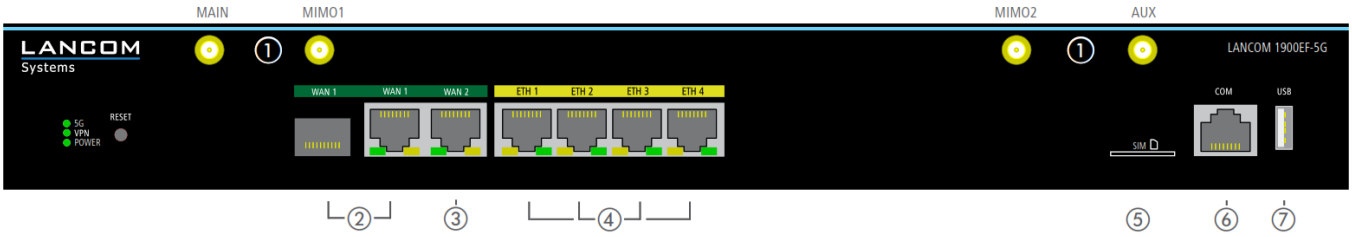
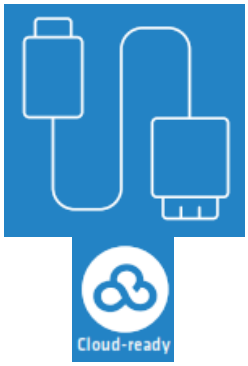
LANCOM 1900EF-5G Multi-WAN VPN-Gateway User Guide

LANCOM Systems

LANCOM 1900EF-5G
Quick Reference Guide





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1900EF-5G Multi-WAN VPN-Gateway

1. **5G antenna connectors**

   Connect the supplied cellular antennas to the connectors MAIN / AUX or MIMO1 / MIMO2 at the front of the device.

2. **WAN 1 interfaces (SFP / TP combo port)**

   Insert a suitable SFP module (e.g. 1000Base-SX or 1000Base-LX) into the SFP port. Choose a cable compatible with the SFP module and connect it as described in the module's documentation. SFP module and cables are not included.

   If desired, alternatively connect the WAN 1 TP interface to a WAN modem using the provided Ethernet cable with green connectors.

3.

4. **WAN 2 interface (TP)**

   Connect the WAN 2 interface to a WAN modem using the provided Ethernet cable with green connectors.

5.

6.

7. **Ethernet interface**

   Use the cable with the kiwi-colored connectors to connect one of the interfaces ETH 1 to ETH 4 to your PC or a LAN switch.

8. **SIM card slot**

   Slide the SIM card into the SIM card slot using the marker to ensure that the card is the right way round. Ensure that the SIM card clicks into place on insertion. To remove the card from the device, press the card lightly into the device. Let's go to release the SIM card from the slot.

9. **Configuration interface**

   Use the included serial configuration cable to connect the serial interface (COM) to the serial interface of the device you want to use for configuring / monitoring.

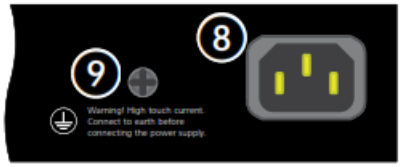
10. **USB interface**

    You can use the USB interface to connect a USB printer or a USB storage device.

11. **Power connector and grounding point (device back side)**

    Supply power to the device via the power connector. Please use the IEC power cable supplied (separately

available for WW devices).



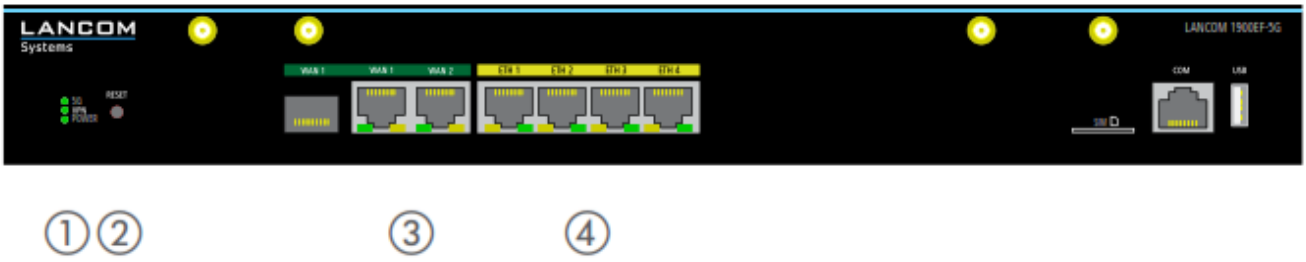
12. **ATTENTION:** High touch current possible! Connect to earth before connecting the power supply.

Please observe the following when setting up the device

- The main plug of the device must be freely accessible.
- For devices to be operated on the desktop, please attach the adhesive rubber footpads.
- Do not rest any objects on top of the device and do not stack multiple devices.
- Keep the ventilation slots on the side of the device clear of obstruction.
- Mount the device into a 19” unit in a server cabinet using the provided screws and mounting brackets.

  Pay attention to the “R” and “L” marks on the brackets for accurate mounting.

Before initial startup, please make sure to take notice of the information regarding the intended use in the enclosed installation guide!
Operate the device only with a professionally installed power supply at a nearby power socket that is freely accessible at all times.



MOUNTING AND CONNECTING THE DEVICE

a **5G** / **VPN** / **POWER**	
5G	
Off	Cellular interface disabled
Green, permanently	Connection to cellular network active
Green, flickering	Cellular data transmission
Orange, permanently	Login to cellular network successful
Orange, blinking	Logging on to the cellular network
Red, permanently	Hardware error/module unavailable
Red / green, blinking	SIM card error (PIN)
Red/orange, blinking	Uploading module firmware
VPN	
Off	VPN connection inactive
Green, permanently	VPN connection active
Green, flashing	VPN connecting
POWER	
Off	Device switched off
Green, permanently*	Device operational, resp. the device is paired/claimed and LANCOM M anagement Cloud (LMC) is accessible
Green / red, blinking	No password set. Without a password, the configuration data in the devi ce is unprotected.
Red, blinking	Charge or time limit reached
1x green inverse blinking*	Connection to the LMC active, pairing OK, device not claimed
2x green inverse blinking*	Pairing error, resp. LMC activation code not available
3x green inverse blinking*	LMC not accessible, resp. communication error

b **RESET**	
Reset button	short press > Restart the device long press > Reset the device
c **WAN 1** / **WAN 2**	
Green, orange off	No networking device connected
Green, permanently	Connection to network device operational, no data traffic
Green, flickering	Data transmission
Orange off	1000 Mbps
Orange, permanently	10 / 100 Mbps
d **ETH 1 – ETH 4**	
Green, orange off	No networking device connected
Green, permanently	Connection to network device operational, no data traffic
Green, flickering	Data transmission
Orange off	1000 Mbps
Orange, permanently	10 / 100 Mbps

TECHNICAL DETAILS

Hardware	
Power supply	Internal power supply unit (100–240 V, 50-60 Hz)
Power consumption	Max. 27 W
Environment	Temperature range 0–40 °C, humidity 0–95 %; non-condensing
Housing	Robust metal housing, 1 HU with mounting brackets for 19“ installation, 345 x 44 x 253 mm (W x H x D)
Number of fans	1 quiet fan
Interfaces	
WAN 1 / WAN 2	WAN 1 SFP: Compatible with optional LANCOM SFP modules. Set as a WAN port ex-factory, can be configured as a LAN port. WAN 1 / WAN 2 TP: 10 / 100 / 1000 Base-TX, autosensing full duplex (WAN 1) / autosensing (WAN 2), auto node hub

ETH1 – ETH 4	4 individual ports, 10 / 100 / 1000 Mbps Gigabit Ethernet, by default set to switch mode. U p to 3 ports can be operated as additional WAN ports. Ethernet ports can be electrically disabled in the LCOS configuration.
Config (Com) / V.2 4	Serial configuration interface / COM-port: 9,600 – 115,200 baud
USB	USB 2.0 hi-speed host port for connecting USB printers (USB print server), serial devices (COM- port server) or USB drives (FAT file system)
5G	Four SMA connectors for the supplied dipole rod antennas, compatible LANCOM AirLancer antennas for 5G, 4G, or from other manufacturers. Please respect the restriction s which apply in your country when setting up an antenna system (particularly antenna gai n/transmission power).
WAN protocols	
Ethernet	PPPoE, Multi-PPPoE, ML-PPP, PPTP (PAC or PNS) and IPoE (with or without DHCP), RIP-1, RIP- 2, VLAN, GRE, EoGRE, L2TPv2 (LAC or LNS), IPv6 over PPP (IPv6 and IPv4/IPv6 dual stack session), IP(v6)or (autoconfiguration, DHCPv6 or static)
Data transmission in cellular networks – supported standards and power (dBm)	
LTE / LTE Advanced	Band 1: 24.0; band 3: 24.8; band 7: 24.8; band 8: 24.0; band 20: 24.0; band 34: 24.0; band 38: 24.8; band 40: 24.8; band 42: 24.8
5G NR	n1: 24.0; n3: 24.0; n28: 24.0; n41: 24.0; n77: 24.5; n78: 24.5
Declaration of Conformity	
Hereby, LANCOM Systems GmbH | Adenauerstrasse 20/B2 | D-52146 Wuerselen, declares that this device is i n compliance with Directives 2014/30/EU, 2014/53/EU, 2014/35/EU, 2011/65/EU, and Regulation (EC) No. 190 7/2006. The full text of the EU Declaration of Conformity is available at the following Internet address: **www.lan com-systems.com/doc**	
Package content	
Documentation	Quick Reference Guide (DE/EN), Installation Guide (DE/EN)
Cables	1 Ethernet cable, 3 m (kiwi colored connectors); 1 Ethernet cable, 3 m (green connectors); 1 IEC power cord 230 V (not for WW devices)
Antennas	Four 5G/4G antennas for 5G/LTE

Mounting brackets	Two 19” brackets for rack mounting

*) The additional power LED statuses are displayed in a 5-second rotation if the device is configured to be managed by the LANCOM Management Cloud.

Documents / Resources

	LANCOM 1900EF-5G Multi-WAN VPN-Gateway [pdf] User Guide 1900EF-5G, Multi-WAN VPN-Gateway, 1900EF-5G Multi-WAN VPN-Gateway

References

- L DoC - LANCOM Systems GmbH