LANCOM 1800VAW Next-Level Networking Gateway User Guide

Contents

LANCOM

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Product Information

The LANCOM 1800VAW is a networking device that provides various connectivity options and features. It includes Wi-Fi antenna connectors, a power supply connection socket, a reset button, a USB-C configuration interface, WAN interfaces (SFP/TP combo port), ethernet interfaces, a USB interface, and a VDSL/ADSL interface. The device is designed for IP-based connections and can be used for connecting to the internet, setting up local area networks, and connecting peripheral devices such as printers or USB data mediums.

Hardware Quick Reference

- Wi-Fi antenna connectors: Screw the supplied Wi-Fi antennas to the appropriate connectors.
- Power supply connection socket: Use only the supplied power adapter!
- Reset button: Short press > device restart, Long press > device reset
- USB-C configuration interface: A USB-C cable is required to configure the device (cable not supplied)
- WAN interfaces (SFP/TP combo port): Insert a suitable LANCOM SFP module into the SFP port. Choose a compatible cable and connect it as described in the SFP module’s mounting instructions.
- Alternatively, connect the WAN TP interface to a WAN modem using an Ethernet cable.
- Ethernet interfaces: 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.
- USB interface: Connect a USB data medium or a USB printer to the USB interface (cable not supplied).
- VDSL/ADSL interface: Connect the VDSL interface and the TAE socket of the provider using the enclosed DSL cable for the IP-based connection.

Product Usage Instructions

Before using the LANCOM 1800VAW, please follow these instructions:

1. Ensure you have read and understood the information regarding the intended use in the enclosed installation guide.

2. Operate the device only with a professionally installed power supply at a nearby power socket that is freely accessible at all times.
3. The power plug of the device must be freely accessible.
4. Please note that support service for third-party accessories is excluded.
5. When setting up the device on a table, use the enclosed self-adhesive rubber pads, if applicable.
6. Do not rest any objects on top of the device and do not stack multiple devices.
7. Keep all ventilation slots of the device clear of obstruction.
8. If desired, you can mount the device in a rack using the optional LANCOM CPE Rack Mount/CPE Rack Mount Plus (separately available).

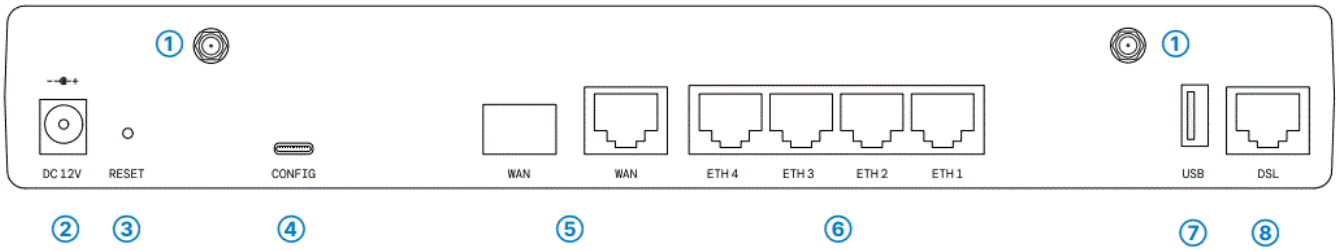
LED Indicators:

The LANCOM 1800VAW has LED indicators that provide information about the device's status. Here are the meanings of different LED states:

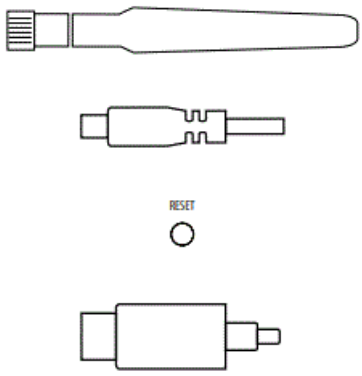
- **Power:** Blue, permanently on – Device switched off
- **Power:** 1x blue, inverse blinking – Device ready for operation or device paired and LANCOM Management Cloud (LMC) accessible
- **Power:** 2x blue, inverse blinking – Connection to LMC active, pairing OK, device not claimed
- **Power:** 3x blue, inverse blinking – Pairing error or LMC activation code/PSK not present
- **Power:** LMC not reachable or communication error
- **Online:** Blue, blinking – WAN connection not active
- **Online:** Blue, inverse blinking – WAN connection in progress (e.g., PPP negotiation)
- **Online:** Blue, permanently on – WAN connection active
- **WAN:** Blue, permanently off – No link available/interface switched off
- **WAN:** Blue, flickering – Link available, no data transmission
- **WAN:** Blue, permanently on – Data Transmission
- **SFP:** Blue, permanently off – No link available/interface switched off
- **SFP:** Blue, flickering – Link available, no data transmission
- **SFP:** Blue, permanently on – Data Transmission
- **DSL:** Blue, blinking/fast blinking – Interface switched off
- **DSL:** Blue, permanently on – DSL Handshake/DSL Training/DSL Sync
- **ETH1-ETH4:** Blue, permanently off – No link available/interface switched off
- **ETH1-ETH4:** Blue, blinking – Link available, no data transmission
- **ETH1-ETH4:** Blue, permanently on – Data Transmission

Please refer to the user manual for more detailed information on the LANCOM 1800VAW and its usage.

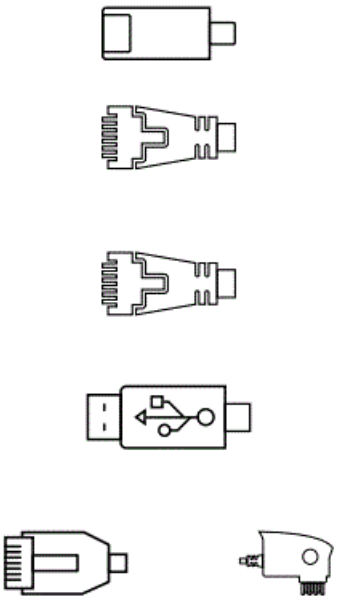
OVERVIEW



1. **Wi-Fi antenna connectors**
   - Screw the supplied Wi-Fi antennas to the appropriate connectors.
2. Power supply connection socket
   - Use only the supplied power adapter!
3. **Reset button**
   - Short press > device restart
   - Long press > device reset RESET
4. **USB-C configuration interface**
   - A USB-C cable is required to configure the device (cable not supplied)

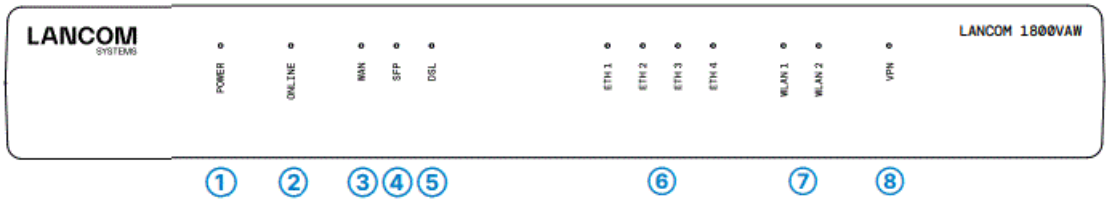


5. **WAN interfaces (SFP / TP combo port)**
   - Insert a suitable LANCOM SFP module (e.g. 1000Base-SX or 1000Base-LX) into the SFP port. Choose a cable compatible with the SFP module and connect it as described in the SFP module's mounting instructions www.lancom-systems.com/SFP-module-MI. (SFP module and cable are not included)
   - If desired, alternatively connect the WAN TP interface to a WAN modem using an Ethernet cable.
6. **Ethernet interfaces**
   - 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.
7. **USB interface**
   - Connect a USB data medium or a USB printer to the USB interface. (cable not supplied)
8. **VDSL / ADSL interface**
   - Connect the VDSL interface and the TAE socket of the provider using the enclosed DSL cable for the IP-based connection. (For more information, please contact your Internet provider).



- 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.
- The power plug of the device must be freely accessible.
- Please note that support service for third-party accessories is excluded.
- Please observe the following when setting up the device
- When setting up on the table, use the enclosed self-adhesive rubber pads, if applicable.
- Do not rest any objects on top of the device and do not stack multiple devices.
- Keep all ventilation slots of the device clear of obstruction.
- Rack installation with the optional LANCOM CPE Rack Mount / CPE Rack Mount Plus (separately available)

Specifications



Power

- **Off** Device switched off
- **Blue,** permanently* Device ready for operation or device
- **paired** and LANCOM Management
- **Cloud** (LMC) accessible.
- **1x blue,** inverse blinking* Connection to LMC active, pairing OK, device not claimed 2x blue, inverse
- **blinking*** Pairing error or LMC activation code/ PSK not present. 3x blue, inverse
- **blinking*** LMC not reachable resp. communication error

Online

- **Off-WAN** connection not active
- **Blue,** blinking WAN connection in progress (e.g. PPP negotiation)
- **Blue,** inverse blinking Additional WAN connection in progress
- **Blue,** permanently WAN connection active

WAN

- Off No link available / interface switched off
- Blue, permanent Link available, no data transmission
- Blue, flickering Data transmission

SFP

- **Off** No link available / interface switched off
- **Blue,** permanent Link available, no data transmission
- **Blue,** flickering Data transmission

DSL

- **Off** Interface is switched off
- **Blue, blinking** / **fast blinking** DSL Handshake
  - DSL Training
- **Blue,** permanent DSL Sync

ETH1 – ETH4

- **Off** No link available or interface switched off
- **Blue,** permanent Link available, no data transmission
- **Blue,** blinking Data transmission

WLAN 1 / **WLAN 2**

- **Off** No Wi-Fi network defined or Wi-Fi
  - module disabled. No beacons are sent from the Wi-Fi module.
- Blue, blinking DFS Scanning or other scan process
- **Blue,** permanently At least one Wi-Fi network defined and
  - Wi-Fi module activated. Beacons are sent from the Wi-Fi module.

VPN

- **Off** No VPN connection active
- **Blue,** blinking / inverse blinking VPN connection in progress / additional VPN connection in progress
- **Blue,** permanent VPN connection active

Hardware

- **Power supply** 12 V DC, external power adapter
  - For an overview of the power supplies compatible with your device, see **www.lancom-systems.com/kb/power-supplies**.
- **Environment** Temperature range 0 – 40 °C; humidity 0 – 95 %; non-condensing
- **Housing** Robust plastic housing, connectors on the back, prepared for wall mounting; dimensions 293 x 44 x 190 mm (W x H x D)
- **Fan** 1 quiet fan

Interfaces

- **VDSL2** VDSL2 acc. to ITU G.993.2; profiles 8a, 8b, 8c, 8d, 12a, 12b, 17a, 30a, 35b
  - VDSL Supervectoring acc. to ITU G.993.2 (Annex Q)
  - VDSL2 vectoring acc. to ITU G.993.5 (G.Vector)
  - Compatible with VDSL2 and with Deutsche Telekom‘s U-R2 connection (1TR112)
  - ADSL2+ over ISDN acc. to ITU G.992.5 Annex B/J with DPBO, ITU G.992.3, and ITU G.992.1
  - ADSL2+ over POTS acc. to ITU G.992.5 Annex A/M with DPBO, ITU G.992.3 and ITU.G.992.1
  - Supports only one virtual circuit in ATM (VPI-VCI pair) at a time
- **WAN** (Combo port) SFP / TP
- WAN **SFP:** Slot for small form-factor pluggable Gigabit Ethernet transceiver (mini-GBIC).
- **Compatible** with optional LANCOM SFP modules for fiber optic connections.
- Switched as a WAN port at delivery, can be configured as a LAN port.
- **WAN TP:** 10 / 100 / 1000 Base-TX, Autosensing Full duplex, Auto node hub
  - ETH 4 individual 10 / 100 / 1000-Mbps Fast Ethernet ports; operate as switch ex-factory.
  - Up to 3 ports can be switched as additional WAN ports.
  - USB USB 2.0 Hi-Speed host port for connecting USB printers (USB print server), serial devices
  - (COM-port servers), or USB data media (FAT file system)
  - Wi-Fi Frequency bands: 2400-2483.5 MHz (ISM) and 5150-5725 MHz (country-specific restrictions possible)
  - Radio channels 2.4 GHz: Up to 13 channels, max. 3 non-overlapping (2.4 GHz band)
  - Radio channels 5 GHz: Up to 26 non-overlapping channels (available channels depending on country-specific regulation and associated with automatic, dynamic DFS channel selection)
- Configuration interface
  - USB-C configuration interface
- **WAN protocols**
  - Ethernet PPPoE, Multi-PPPoE, ML-PPP, PPTP (PAC or PNS), and IPoE (with or without DHCP)

Package content

- **Cable** 1 DSL cable for an IP-based line, 4.25 m; 1 Ethernet cable, 3m
- **Antennas** 2 external 3 dBi dipole dual band antennas
- **Power adapter** External power adapter
- The additional power LED statuses are displayed in a 5-seconds rotation if the device is configured to be

managed by the LANCOM Management Cloud.

- This product contains separate open-source software components which are subject to their own licenses, in particular the General Public License (GPL). The license information for the device firmware (LCOS) is available on the device‘s WEBconfig interface under “Extras > License information“. If the respective license demands, the source files for the corresponding software components will be made available on a download server upon request.
- Hereby, LANCOM Systems GmbH | Adenauerstrasse 20/B2 | D-52146 Wuerselen, declares that this device is in compliance with Directives 2014/30/EU, 2014/53/EU, 2014/35/EU, 2011/65/EU, and Regulation (EC) No. 1907/2006. The full text of the EU Declaration of Conformity is available at the following Internet address: **www.lancom-systems.com/doc**
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Documents / Resources

	**LANCOM 1800VAW Next-Level Networking Gateway** [pdf] User Guide 1800VAW Next-Level Networking Gateway, Next-Level Networking Gateway, Networking Gateway, Gateway

References

- **Business network solutions "made in Germany": LANCOM Systems GmbH**
- **DoC - LANCOM Systems GmbH**
- **Confluence Mobile - LANCOM Wissensdatenbank**
- **lancom-systems.com/SFP-module-MI**